

!" #&/
4;O <548G=>3> 70AB>AC20==O ;V:0@AL:>3> 70A>1C

!□"
(CLEXANE")

=AB@C:FVO 4;O H?@8F-4>78 2000 0=B8-%

!,:04:

4VNG0 @5G>28=0: 5=>:A0?0@8=;
1 <; @>7G8=C 100 <3 5=>:A0?0@8=C =0B@VN;
1 H?@8F-4>70
4>?>28=0: 2>40 4;O V=T:FV9.

V:0@AL:0 D>@<0. >7G8= 4;O V=T:FV9 .
A=>2=V DV78:>-EVABV: 15710@2=89 01> 1;V4>-6>2B>3> :>;L>@C, ?@>7>@89 @>7G8=.

\$0@<0:>B5@0?52B8G=0 3@C?0. □=B8B@><1>B8G=V 70A>18. @C?0 35?0@8=C. >4 ""% 0105.

\$0@<0:>;>3VG=V 2;0AB82>ABV.

\$0@<0:>48=0

=>:A0?0@8= T =87L:><>;5:C;O@=8< 35?0@8=><, C O:>3> 0=B8B@><1>B8G=0 B0 0=B8:>03C;O=B=0 0:B82=VABL AB0=40@B=>3> 35?0@8=C =5
?>2O70=V 1>N. >:0 0=B8-%0 0:B82=VABL, =V6 0=B8-0 01> 0=B8B@><1V=>20 0:B82=VABL. ;O 5=>:A0?0@8=C A?V22V4=>H5==O F8E 42>E 284V2
0:B82=>ABV AB0=>28BL 3,6.

?@>DV;0:B8G=8E 4>70E 2V= =5 <0T 7=0G=>W 4VW =0 "".

0 ?V:C 0:B82=>ABV ;V:C20;L=8E 4>7 "" <>65 1CB8 2 1,5-2,2 @078 1V;LH5 :=B@>;L=>3> G0AC. &5 ?>4>265==O 2:07CT =0 70;8H:>2C 0=B8B@>
<1V=>2C 4VN.

\$0@<0:>:V=5B8:0.

\$0@<0:>:V=5B8G=V ?>:07=8:8 5=>:A0?0@8=C >FV=N20;8 =0 ?V4AB02V B@820;>ABV 0=B8-%0 B0 0=B8-0 0:B82=>ABV C ?;072V ?@8 @5:>
<5=4>20=8E 4>70E (20;V4>20=V 0;VB8G=V <5B>48) ?VA;O >4=>:@0B=>3> B0 ?>2B>@=>3> ?V4H:V@=>3> 22545==O B0 ?VA;O >4=>:@0B=>W
2=CB@VH=L>25==>W V=T:FVW.

V>4>ABC?=VABL. =>:A0?0@8=, I> 22>48BLAO ?V4H:V@=>, H284:> B0 <0965 ?>2=VABN 2A<>:BCTBLAO (?@81;87=> =0 100 %). 0:A8<0;L=0
0:B82=VABL C ?;072V A?>AB5@V30TBLAO G5@57 3-4 3>48=8 ?VA;O 22545==O. "0:0<0:A8<0;L=0 0:B82=VABL (I> 28@065=0 C 0=B8-%0)
AB0=>28BL 0,18±0,04 (?VA;O 2000 0=B8-%0), 0,43±0,11 (?VA;O 4000 0=B8-%0) ?@8 ?@>DV;0:B8G=>

>;NA=0 2=CB@VH=L>25==0 V=T:FVO 3000 0=B8-%0 7 ?>40;LH8<8 ?V4H:V@=8<8 V=T:FVO<8 ?> 100 0=B8-%0 /:3 :=6=V 12 3>48= ?@872>48BL 4>
4>AO3=5==O ?5@H>3> <0:A8<0;L=>3> @V2=O :=F5=B@0FVW 0=B8D0:B>@0 %0, I> AB0=>28BL 1,16 /<; (n=16), B0 A5@54=L>3> ?>:07=8:0 ?;>IV
?V4 D0@<0:>:V=5B8G=>N :@82>N, I> 2V4?>2V40T 88 % @V2=>206=>3> @V2=O. V2=>206=89 AB0= 4>AO30TBLAO =0 4@C389 45=L ;V:C20==O.
<560E @5:><5=4>20=8E 4>7 D0@<0:>:V=5B8:0 5=>:A0?0@8=C T ;V=V9=>N. =CB@VH=L>-V=482V4C0;L=0 B0 2B>@=8E ?V4H:V@=8E 22545=L
74>@>28< 4>1@>2>;LFO< 4000 0=B8-%0 1 @07 =0 4>1C @V2=>206=89 AB0= 4>AO30TBLAO =0 2-9 45=L, ?@8 FL>:A0?0@8=C ?@81;87=> =0 15 %

28I0, =V6 ?VA;O >4=>:@0B=>W 4>78. V25=L 0:B82=>ABV 5=>:A0?0@8=C C @V2=>206=> 65 % 28I89, =V6 ?VA;O >4=>:@0B=>W 4>78, 0<0:A8 <0;L=89 B0 2V ?VA;O ?V4H:V@=>3> 22545==O ?@81;87=> 2 10 @07V2 =86G0 70 0=B8-%0 0:B82=VABL. !5@54=O<0:A8<0;L=0 0=B8-0 0:B82=VABL A?>AB5@V30TBLAO ?@81;87=> G5@57 3-4 3>48=8 ?VA;O ?V4H:V@=>W V=T:FVW B0 4>AO30T 0,13 0=B8-0 k; ?@8 ?>2B>@=8E 22545==OE 4>78 100 0=B8-%0 /:3 2 @078 =0 4>1C.

\$0@<0:>:V=5B8G=>W 270T<>4VW :A0?0@8=>< B0 B@><1>;VB8G=8< 70A>1><< ?@8 >4=>G0A=>AB5@V30;>AO.

>7?>4V; 1 □T< @>7?>4V;C 0=B8-%0 0:B82=>ABV 5=>:A0?0@8=C AB0=>28BL ?@81;87=>5 ;VB@V2 V T =01;865=8< 4> >1T2V.

5B01>;V7 =>:A0?0@8= <5B01>;V7CTBLAO ?5@5206=> C ?5GV=FV (45AC;LD0B870FVO, 45?>;V<5@870FVO).

82545==O. VA;O ?V4H:V@=>3> 22545==O ?5@V>4 =0?V2282545==O 0=B8-%0 0:B82=>ABV C =87L:><;5:C;O@=8E 35?0@8=V2 28I89, =V6 C =5D@0:FV>=>20=8E 35?0@8=V2.

=>:A0?0@8=C 2;0AB825 <>=>D07=5 282545==O 7 ?5@V>4>< =0?V2282545==O ?@81;87=> 4 3>48=8 ?VA;O ?V4H:V@=>3> 22545==O >4=>:@0B=>W 4>78 V ?@81;87=> 7 3>48= ?VA;O 22545==O ?>2B>@=8E 4>7.

=87L:><>;5:C;O@=>3> 35?0@8=C 0=B8-0 0:B82=VABL C ?;072V 7=86CTBLAO H284H5, =V6 0=B8-%0 0:B82=VABL.

=>:A0?0@8= B0 9>3> <5B01>;VB8 282>4OBLAO G5@57 =8@:8 (=5=0A8GC20=89 <5E0=V7<) V 6>2G>282V4=V H;OE8.

8@:>289 ;;V@5=A D@03<5=BV2, I> <0NBL 0=B8-%0 0:B82=VABL, AB0=>28BL ?@81;87=> 10 % 2V4 22545=>W 4>78, 0 7030;L=0 =8@:>20 5:A:@5FVO 0:B82=8E B0 =50:B82=8E @5G>28= 40 % 4>78.

@C?8 28A>:>3> @878:C.

0FVT=B8 ;VB=L>3> 2V:C. 82545==O C?>2V;L=5=5 G5@57 DV7V>;>3VG=> 7=865=C DC=:FVN =8@>: C FV9 3@C?V. &O 77C20==O B0 @568< 22545==O ?@8 ?@>DV;0:B8G=V9 B5@0?VW, O:I> =8@:>20 DC=:FVO C B0:8E E2>@8E 70;8H0TBLAO C ?@89=OB=8E<560E, B>1B> :>;8 2>=0 ;8H5 B@>E8 7=865=0.

5@54 ?>G0B:>< ;V:C20==O C E2>@8E 2V:> 2V4 75 @>:V2 =5>1EV4=> A8AB5<0B8G=> >FV=N20B8 DC=:FVW =8@>: 70 D>@N >:@>DB0 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

5<>4V0;V7. 87L:><>;5:C;O@=89 35?0@8= 22>48B8 2 0@B5@V0;L=C <03VAB@0;L :=BC@C 4;O 35<>4V0;V7C C 2V4?>2V4=8E 4>70E 7 <5B>N 70?>1V30==O B@><1>CB2>@5==N C A8AB5

\$0@<0:>:V=5B8G=V ?0@0<5B@8 C ?@8=F8?V 70;8H0NBLO =57N =8@:>2>N =54>AB0B=VABN.

;V=VG=V E0@0:B5@8AB8:8.

>:070==O.

@>DV;0:B8:0 25=>7=>W B@><1>5<1>;VW ?@8 EV@C@3VG=8E 2B@CG0==OE, O:V AC?@>2>46CNBLAO ?>

@>DV;0:B8:0 B@><1>CB2>@5==O 2 5:AB@0:>@?>@0;L=>=BC@V :@>2>>1V3C ?V4 G0A ?@>2545==O 35<>4V0;V7C (?@>F54C@0 2 A5@54=L> B@820T ?@81;87=> 4 3>48=8 01> <5=H5).

@>B8?>:070==O.

V428I5=0 GCB;82VABL 4> 5=>:A0?0@8=C, 35?0@8=C 01> 9>3> ?>EV4=8E, 2;;NG0NG8 V=HV =87L:><>;5:C;O@=V 35?0@8=8.

002=VABL 2 0=0<=57V BO6:>W 35?0@8=-V=4C:>20=>W B@><1>F8B>?5=VW ("") B8?C II, A?@8G8=5=>W 70AB>AC20==O< =5D@0:FV>=>20=>3> 01> =87L:><>;5:C;O@=>3> 35?0@8=C (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

5<>@03VG=V ?@>O28 01> AE8;L=VABL 4> :@>2>B5GV C 7207:C 7 ?>@CH5==O< 35<>AB07C (28=OB:>< 4;O FL>3> ?@>B8?>:070==O <>65 1CB8 A8=4@>< 48A520=>3> 2=CB@VH=L>AC48==>3> 73>@B0==O :@>2V, O:I> 2V= =5 ?>2O70=89 7 ;V:C20==O< 35?0@8=>< (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

@30=VG=5 C@065==O 7 V<>2V@=VABN 28=8:=5==O :@>2>B5GV.

;V=VG=> 7=0GCI0 0:B82=0 :@>2>B5G0.
:B82=0 28@07:0 H;C=:0 01> 420=04FOB8?0;>W :8H:8.
%2>@8<, O:V >B@8DV;0:B8:8, ?@>B8?>:070=0-@53V>=0@=0 0=5AB57VO ?@8 ?;0=>28E EV@C@3VG=8E 2B@CG0==OE.
"O6:0 =8@:>20 =54>AB0B=VABL (:;V@5=A :@50B8=C ?@81;87=> 30<;/E2 70 D>@N >:@>DB0->;B0, 482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

?5@HV 24 3>48=8 ?VA;O 2=CB@VH=L<>7:>2>3> :@>2>28;82C.
@V< B>3>, F59 ?@5?0@0B 1060=> =5 ?@87=0G0B8 C ?@>DV;0:B8G=8E 4>70E ?0FVT=B0< 2V:>< 2V4 65 @>:V2 C :><1V=0FVW 7 B0:8<8
;V:0@AL:8<8 70A>10<8 (482. @>74V; «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»):

1. F5B8;A0;VF8;>20 :8A;>B0 C 7=51>;N20;L=8E, 60@>7=86C20;L=8E V ?@>B870?0;L=8E 4>70E.
2. 5AB5@>W4=V ?@>B870?0;L=V 70A>18 (A8AB5<=5 70AB>AC20==O).
3. 5:AB@0= 40 (?0@5=B5@0;L=5 22545==O).

70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9.

52=V ;V:0@AL:V 70A>18 01> B5@0?52B8G=V ;:0A8<>6CBL A?@80B8 @>728B:C 3V?5@:0;5;V :0;VN, :0;V9715@V30NGV 4VC@5B8:8, V=3V1VB>@8
?5@5B2>@N20;L=>3> D5@<5=BC, V=3V1VB>@8 0=3V>B5=78=C , =5AB5@>W4=V ?@>B870?0;L=V ?@5?0@0B8, 35?0@8=8 (=87L:><;5:C;O@=89
01> =5D@0:FV9=89 35?0@8=), F8;>A?>@8= B0 B0:@>;V728B>: 3V?5@:0;5
0FVT=B8 ;VB=L>3> 2V:C (2V:>< 2V4 65 @>:V2).

51060=V :><1V=0FVW.

0F5B8;A0;VF8;>2>N :8A;>B>N C 7=51>;N20;L=8E, 60@>7=86C20;L=8E B0 ?@>B870?0;L=8E 4>70E (V 70 0=0;>3VTN V=HV A0;VF8;0B8).
1V;LHCTBLAO @878: :@>2>B5GV (?@83=VG5==O DC=:FVW B@><1>F8BV2 ?V4 4VTN A0;VF8;0BV2 B0 C@065==O A;87>2>W >1>;>=:8 H;C=:>2>-
:8H:>2>3> B@0:BC). !;V4 70AB>A>2C20B8 60@>7=86C20;L=V, 7=51>;N20;L=V 70A>18, I> =5 =0;560BL 4> A0;VF8;0BV2 (=0?@8::04, ?0@0F5B0<>);
=5AB5@>W4=8<8 ?@>B870?0;L=8<8 70A>10<8, 2;;NG0NG8 :5B>@>;0: (A8AB5<=5 70AB>AC20==O). 1V;LHCTBLAO @878: :@>2>B5GV
(?@83=VG5==O DC=:FVW B@><1>F8BV2 ?V4 4VTN B0 C@065==O A;87>2>W >1>;>=:8 H;C=:>2>-:8H:>2>3> B@0:BC). !:I> =5<>6;82> C=8:=CB8
>4=>G0A=>3> 70AB>AC20==O, A;V4 ?@>2>48B8 @5B5;L=5 ;;V=VG=5 A?>AB5@565==O.
45:AB@0=>< 40 (?0@5=B5@0;L=5 70AB>AC20==O). V42815=89 @878: :@>2>B5GV (?@83=VG5==O 45:AB@0=>< 40 DC=:FVW B@><1>F8BV2).
><1V=0FVW, I> ?>B@51CNBL 26820==O 70?>1V6=8E 70E>4V2.
?5@>@0;L=8<8 0=B8:>03C;O=B0<8. >A8;5==O 0=B8:>03C;O=B>3> 5D5:BC. @8 70@0;L=8< 0=B8:>03C;O=B>< A;V4 ?>A8;8B8 ;;V=VG=89 =03;04.

><1V=0FVW, O:V A;V4 2@0E>2C20B8.

V=3V1VB>@0<8 03@530FVW B@><1>F8BV2 (:@V< 0F5B8;A0;VF8;>2>W :8A;>B8 C 7=51>;N20;L=8E, 60@>7=86C20;L=8E B0 ?@>B870?0;L=8E
4>70E;): 01A8:A8<01, 0F5B8;A0;VF8;>20 :8A;>B0 2 0=B803@530=B=8E 4>70E ?@8 :0@4V>;>3VG=8E B0 =52@>;>3VG=8E ?>:070==OE,
15@0?@>AB, ;;>?V4>3@5;L, 5?B8DV10B84, V;>?@>AB, B8;>?V48=, B8@>DV10=. 1V;LHCTBLAO @878: :@>2>B5GV.
0FVT=B8 2V:>< 4> 65 @>:V2.

><1V=0FVW, O:V A;V4 2@0E>2C20B8 □><1V=>20=5 70AB>AC20==O ?@5?0@0BV2, O:V 2?;820NBL =0 35<>AB07, <>65 71V;LH8B8 @878:
28=8:=5==O :@>2>B5GV. ">2V4 2V:C ?0FVT=BV2, A;V4 2@0E>2C20B8 (0 >B65, ?@>2>48B8 B@820;5 ;;V=VG=5 A?>AB5@565==O B0, <>6;82>,
;01>@0B>@=5 >1AB565==O) 5D5:B8, I> 28=8:0NBL ?@8 >4=>G0A=>AC20==V C ?@>DV;0:B8G=8E 4>70E V7 B0:8<8 ;V:0@AL:8<8 70A>10<8:
?5@>@0;L=V 0=B8:>03C;O=B8, V=3V1VB>@8 03@530FVW B@><1>F8BV2 (01A8:A8<01, , 0F5B8;A0;VF8;>20 :8A;>B0 C 1C4L-O:8E 4>70E,
;>;?V4>3@5;L, A8AB5<=V 3;N:>:>@B8:>AB5@>W48, 5?B8DV10B84, V;>?@>AB, B8;>?V48=, B8@>DV10=) B0 B@><1>;VB8G=V ?@5?0@0B8.

A>1;82>ABV 70AB>AC20==O.

@5?0@0B =5 4>72>;OTBLAO 22>48B8 2=CB@VH=L<<□O7>2>.

87L:><>;5:C;O@=V 35?0@8=8 =5 T 270T<>70B@V1=> ?@84V;OB8 C203C B0 4>B@8=:@5B=8E A?>A>1V2 70AB>AC20==O, @5:><5=4>20=8E 4;O :>6=>3> 7 ?@5?0@0BV2 =87L:><>;5:C;O@=8E 35?0@8=V2.

0?>1V6=V 70E>48 ?@8 70AB>AC20==V.

@>2>B5G0. /: V ?@8 ;V:C20==V 0=B8:>03C;O=B0<8, <>65 28=8:0B8 :@>2>B5G0 (482. @>74V; <<>1VG=V @50:FVW»).# 28?04:C 28=8:=5==O :@>2>B5GV A;V4 2AB0=>28B8 WW ?@8G8=C B0 @>7?>G0B8 2V4?>2V4=5 ;V:C20==O.

\$C=:FVO =8@>.: 5@54 ?>G0B:>< ;V:C20==O =87L:><>;5:C;O@=8< 35?0@8=>< 4C65 206;82> >FV=8B8 DC=:FVN =8@>.: 7>:@5<0 C E2>@8E 2V:>< 2V4 75 @>:V2, H;OE<< 287=0G5==O ;V@5=AC :@50B8=V=C 70 4>?><>3>N D>@:>@>DB0 B0 =09>AB0==VH8E ?>:07=8:V2 28

?0FVT=BV2 G>;>2VG>W AB0BV: ;V@5=A :@50B8=V=C = (140 - 2V:) × <0A0 BV;0/0,814 × A8@>20B:>289 :@50B8=V=, 45 2V: 28@060TBLAO C @>:0E, <0A0 BV;0 - C :3, 0 A8@>20B:>289 :@50B8=V= - C

;O ?0FVT=B>: FO D>@28==0 1CB8 A:>@83>20=0 H;OE<< <=>65==O >B@8<0=>3> @57C;LB0BC =0 0,85.

/:I> A8@>20B:>289 :@50B8=V= 28@060TBLAO C <3/<;, >B@8<0=5 7=0G5==O =5>1EV4=> ?><=>68B8 =0 :>5DVFT=B 8,8.

0AB>AC20==O C ;V:C20;L=8E 4>70E ?@>B8?>:070=> ?0FVT=B0< V7 4V03=>AB>20=>N BO6:>N =8@>:2>N =54>AB0B=VABN (:;V@5=A :@50B8=V=C - ?@81;87=> 30 <;E2) (482. @>74V; <<@>B8?>:070==O»).

@83=VG5==O A5:@5FVW 0;L4>AB5@>=C. 5?0@8= <>65 ?@83=VGC20B8 A5:@5FVN 0;L4>AB5@>=C =04=8@>:28<8 70;>70<8, >A>1;82> C

?0FVT=BV2 7 FC:@>28< 4V015B><, E@>=VG=>N =8@>:2>N =54>AB0B=VABN, C65 VA=CNG8< <5B01>;VG=8< 0F84>7><, ?V428I5=8< @V2=5< :0;VN C ?;072V, 0 B0:>6 C ?0FVT=BV2, O:V ?@89<0NBL ?@5?0@0B8 :0;VN. 878: 3V?5@:0;VT1>@>B=82V =5>1EV4=> 28 ?>G0B:C ;V:C20==O 35?0@8=>< B0

@53C;O@=> :>=B@>;N20B8 C ?>40;LH>A>1;82> O:I> ;V:C20==O B@820T ?>=04 7 4=V2.

01>@0B>@=V ?>:07=8:8.

>=B@>;L @V2=O B@><1>F8BV2 V @878: 35?0@8=V=4C:>20=>W B@><1>F8B>?5=VW (=0?@8.:04, " B8?C). <>6CBL V=4C:C20B8 @>728B>: " II B8?C A5@9>7=>W V>?>A5@54:>20=>W B@><1>F8B>?5=VW, O:0 <>65 A?@8G8=8B8 0@B5@V0;L=V 01> 25=>7=V B@><1>5<1>;VG=V ?>4VW, I>

<>6CBL 1CB8 =5157?5G=8<8 4;O 68BBO 01> ?>3V@HC20B8 DC=:FV>=0;L=89 ?@>3=>7 4;O ?0FVT=B0 (482. @>74V; <<>1VG=V @50:FVW»). ;O

A2>TG0A=>3> 28O2;5==O " 70 ?0FVT=B0<8 =5>1EV4=> 74V9A=N20B8 :>=B@>;L C B0:>@O4:C:

0FVT=B8, I> ?5@5=5A;8 >?5@0B82=5 2B@CG0==O 01> =5I>402=> >B@8<0;8 B@02BO3>< 3 570;56=> 2V4 B>3>, ?@87=0G0TBLAO ?@5?0@0B 4;O ;V:C20;L=>W 01> ?@>DV;0:B8G=>W B5@0?VW, 2 CAVE ?0FVT=BV2 =5>1EV4=5 A8AB5<0B8G=5 28:>=0==O ;01>@0B>@=8E 4>A;V465=L, >A:V;L:8

G0AB>B0 " AB0=>28BL > 0,1 % 01> =02VBL > 1 % C EV@C@3VW B0 B@02<0B>;>3VW. &V 4>A;V465==O <0NBL 2;;NG0B8 287=0G5==O 2<1>F8BV2: - ?5@54 ?@87=0G5==O< 01> =5 ?V7=VH5 =V6 G5@57 24 3>48=8 ?VA;O ?>G0B:C B5@0?VW ?@5?0@0B><;

- C ?>40;LH>BO3>< >4=>3> 4 <0:A8<0;L=>3> @878:C);

- C ?>40;LH> ;V:C20==O ?@>4>26CTBLAO, >48= @07 =0 B8645=L 4> 2V4

0FVT=B 7 V=H8<8 AB0=0<8, 2V4570;56=> 2V4 B>3>, ?@87=0G0TBLAO ?@5?0@0B 4;O ;V:C20;L=>W 01> ?@>DV;0:B8G=>W B5@0?VW, =5>1EV4=5 A8AB5<0B8G=5 28:>=0==O ;01>@0B>@=8E 4>A;V465=L 73V4=> V7 B8<8 6 ?@8=F8?0<8, I> 70AB>A>2CNBLAO 2 EV@C@3VW V B@02<0B>;>3VW

(482. 28I5), C ?0FVT=BV2:

- O:V @0=VH5 >B@8=>20=89 35?0@8= (\$) 01> 2 >AB0==V 6 2CNG8, I> G0AB>B0 " AB0=>28BL > 0,1% 01> =02VBL > 1 %;

- O:V <0NBL 7=0GCIV AC?CB=V 70E2>@N20==O, 2@0E>2CNG8 ?>B5=FV9=C BO6:VABL " C B0:8E ?0FVT=BV2.

V=H8E 28?04:0E, 15@CG8 4> C2038 1V;LH =87L:C G0AB>BC @>728B:C " (< 0,1 %), :>=B@>;L 2<1>F8BV2 <>65 1CB8 >1<565=89 B0:8<8 70E>40<8:

- :>=B@>;L 2<1>F8BV2 =0 ?>G0B:C ;V:C20==O 01> =5 ?V7=VH5 =V6 G5@57 24 3>48=8 ?VA;O ?>G0B:C ;V:C20==O;

- :=B@>;L 2<1>F8BV2 70 =002=>ABV ;;V=VG=>W A8<0B8:8, I> <>65 2:07C20B8 =0 " (1C4L-O:89 =>289 5?V7>4 0@B5@V0;L=>W B0/01> 25=>7=>W B@><1>5<1>;VW, 1C4L-O:5 1>;VA=5 C@065==O H:V@8 2 <>6;82VABL 28=8:=5==O B0:8E A8?>B@51C ?>2V4<>;5==O ?@> =8E ;V:0@N. !;V4 70?V4>7@8B8 28=8:=5==O ", O:I> :V;L:VABL B@><1>F8BV2 =5 ?5@528ICT 150 000/<<3 B0/01> O:I> A?>AB5@V30TBLAO 7<5=H5==O :V;L:>ABV B@><1>F8BV2 =0 30-50 % ?>@V2=O=> 7 ?>?5@54=V< 0=0;V7< :@>2V. " @>72820TBLAO ?5@5206=> 7 5-3> ?> 21-9 45=L ?VA;O ?>G0B:C ;V:C20==O 35?0@8=>< (=09G0ABVH5 28=8:0T ?@81;87=> =0 10-9 45=L).

4=0: C ?0FVT=V2 V7 35?0@8=V=4C:>20=>N B@><1>F8B?>5=VTN 2 0=0<=57V F5 CA:;04=5==O <>65 28=8:0B8 V 7=0G=> @0=VH5. >>48=>:V 28?04:8 A?>AB5@V30;8AO B0:>6 V ?VA;O 21-3> 4=O ;V:C20==O. !;V4 =030B8AO 28O28B8 ?0FVT=V2 7 B0:8< 0=0<=57<< H;OE<< 45B0;L=>3> >?8BC20==O ?5@54 ?>G0B:<< ;V:C20==O.

@V< B>3>, @878: ?>O28 @5F8482C ?@8 ?>2B>@=>AC20==V 35?0@8=C A?>AB5@V30TBLAO 2?@>4>26 1030BL>E @>:V2, 0 V=>4V 70;8H0TBLAO =0702648 (482. @>74V; «@>B8?>:070==O»).

CAVE 28?04:0E 28=8:=5==O " T=52V4:;04=8< AB0=×, O:89 28<030T :=AC;LB0FVW A?5FV0;VAB0.

C4L-O:5 7=0G=5 7<5=H5==O :V;L:>ABV B@><1>F8BV2 (=0 30-50 % ?>@V2=O=> 7 ?>G0B:>28<8 ?>:07=8:0<8) T ?>?5@546C20;L=8< A83=0;<<, =02VBL O:I> ?>:07=8: =5 4>AO3 :@8B8G=>3> @V2=O. /:I> A?>AB5@V30TBLAO 7=865==O :V;L:>ABV B@><1>F8BV2, B> 2 CAVE 28?04:0E ?>28==V 1CB8 268BV B0:V 70E>48:

1) =5309=5 ?>2B>@=5 ?@>2545==O ?V4@0EC=:C :V;L:>ABV B@><1>F8BV2 4;O >B@8<0==O ?V4B25@465==O;

2) ?@8?8=5==O ;V:C20==O 35?0@8=×, O:I> >B@8<0=V @57C;LB0B8 ?V4B25@46CNBL 7=865==O :V;L:>ABV B@><1>F8BV2 01> =02VBL 2:07CNBL =0 WW 71V;LH5==O, O:I> V=H>W >G5284=>W ?@8G8=8 FL>3> =5 28O2;5=>. ;O ?@>2545==O B5ABC =0 03@530FVN B@><1>F8BV2 Vn vitro B0 V;>3VG=>3> 4>A;V465==O 7@07>: :@>2V =5>1EV4=> ?>1V@:C 7 F8B@0B=8< @>7G8=> 70 B0:8E C<>2 =5309=V 70E>48, O:8E =5>1EV4=> 268B8, '@C=BCNBLAO =5 =0 @57C;LB0B0E B5ABC =0 03@530FVN B@><1>F8BV2 Vn vitro 01> V;>3VG=>3> 4>A;V465==O, ?@8 ?@>2545==V O:>3> 28=8:0NBL B@C4=>IV, >A:V;L:8 VA=CT ;8H5 45:V;L:0 A?5FV0;V7>20=8E ;01>@0B>@V9, O:V <>6CBL ?@>2>48B8 B0:V B5AB8, 0 WE @57C;LB0B8 <>6=0 >B@8<0B8 2 =09:@0I>48=. @>B5 FV 4>A;V465==O =5>1EV4=V, >A:V;L:8 <>6CBL 4>?><>3B8 4V03=>ABC20B8 ?>4V1=5 CA:;04=5==O, 1> @878: 28=8:=5==O B@><1>7C ?@8 ?@>4>265==V ;V:C20==O 35?0@8=>< 4C65 28A>:89;

3) ?@>DV;0:B8:0 01> ;V:C20==O B@><1>5<1>;VG=8E CA:;04=5=L, ?>2O70=8E V7 ". /:I> ?@>4>265==O 0=B8:>03C;O=B=>W B5@0?VW T 4C65 206;828<, 35?0@8= A;V4 70<1>B8G=89 70AV1, I> =0;568BL 4> V=H>W EVW 3@C?8, =0?@8:;04, =0B@VN 40=0?0@84 01> 3V@C48=, ?@87=0G5=89 C ;V:C20;L=8E G8 ?@>DV;0:B8G=8E 4>70E V=482V4C0;L=> 4;O :>6=>3> ?0FVT=B0. 5@5EV4 =0 ?5@>@0;L=V 0=B8:>03C;O=B8 <>6=0 ?@>2>48B8 BV;L:8 ?VA;O B>3>, O: :V;L:VABL B@>×1>F8BV2 ?>25@=C;0AO 4> =>@<8, >A:V;L:8 VA=CT ?@8 70AB>AC20==V ?5@>@0;L=8E 0=B8:>03C;O=V2 @878: ?>3V@H5==O ?5@51V3C B@><1>7C. 0@0;L=V 0=B8:>03C;O=B8. !;V4 ?@>2>48B8 V=B5=A82=VH89 ;;V=VG=89 <=>VB>@8=3 B0 ;01>@0B>@=V 4>A;V465==O (?@>B@><1V=>289 G0A, 28@065=89 G5@57 4=5 =>@<0;V7>20=5 A?V22V4=>H5==O (!) 01> :=B@>;N20B8 5D5:B8, A?@8G8=5=V ?5@>@0;L=8<8 0=B8:>03C;O=B0<8. A:V;L:8 VA=CT ?52=89 ?@>. G0AC, ?>:8 ?5@>@0;L=89 0=B8:>03C;O=B 4>AO3=5 <0:A8TW 4VW, A;V4 ?@>4>26C20B8 22545==O 35?0@8=C 2 ?>ABV9=V9 4>7V ABV;L:8, A:V;L:8 ?>B@V1=>, I>1 ! C 42>E ?>A;V4>2=> 28:=>0=8E 0=0;V70E 70;8H0;>AO 2 =5>1EV4=8E B5@0?52B8G=8E<560E. >=VB>@8=3 0=B8D0:B>@-%0 0:B82=>ABV. V;LHVABL ;;V=VG=8E 4>A;V465=L, O:V ?>:070;8 5D5:B82=VABL , 1C;8 ?@>2545=V V7 70AB>AC20==O < 4>7, @>7@0E>20=8E 70;56=> 2V4 <0A8 BV;0 E2>@>3> B0 157 A?5FV0;L=>3> <=>VB>@8=3C ;01>@0B>@=8E ?>:07=8:V2, B>@8A=VABL ?@>2545==O ;01>@0B>@=8E 4>A;V465=L 7 <5B>N >FV=:8 5D5:B82=>ABV ?>:8 I> =5 287=0G5=0. 4=0: <=>VB>@8=3 0=B8-%0 0:B82=>ABV <>65 1CB8 :=@8A=8< 4;O 7<5=H5==O @878:C 28=8:=5==O :@>2>B5GV C ?52=8E ;;V=VG=8E A8BC0FVOE, O:V =09G0ABVH5 ?>2O70=V V7 @878:× ?5@54>7C20==O.

&V A8BC0FVW ?5@5206=> AB>ACNBLAO;V:C20;L=8E ?>:070=L 4> 70AB>AC20==O B0 28=8:0NBL G5@57 4>78, I> 22>4OBLAO ?0FVT=B0< V7:

-,53:>N B0 ?>N =8@:>2>N =54>AB0B=VABN (;V@5=A :@50B8=V=C□ ?@81;87=> 30-60 <;E2, @>7@0E>20=89 70 D>@N >:@>DB0). A:V;L:8
282>48BLAO ?5@5206=> 7 A5G5N, =0 2V43> =5D@0:FV=>=>20=>3> 35?0@8=C, C 28?04:C 1C4L-O:>W =8@:>2>W =54>AB0B=>ABV <>65 28=8:0B8
2V4=>A=5 ?5@54>7C20==O. "O6:0 =8@:>20 =54>AB0B=VABL T ?@>B8?>:070==O< 4> 70AB>AC20==O C ;V:C20;L=8E 4>70E (482. @>74V;
«@>B8?>:070==O»);
- 7=0G=8<8 2V4E8;5==O<8 <0A8 BV;0 2V4 =>@<8 (4C65 <0;0 <0A0 BV;0 V =02VBL :0E5:AVO, >68@V==O);
- :@>2>B5G0<8 =57OA>20=>W 5BV>;>3VW.
0 2V43>, <=>VB>@8=3 ;01>@0B>@=8E ?>:07=8:V2 =5 @5:>5=4>20=89 ?@8 70AB>AC20==V ?@>DV;0:B8G=8E 4>7, O:I> 70AB>A>2C20B8
2V4?>2V4=> 4> B5@0?52B8G=8E @5:>5=40FV9 (7>:@5<0 I>4> B@820;>ABV ;V:C20==O) 01> ?V4 G0A ?@>2545==O 35<>4V0;V7C.
;O B>3> I>1 28O28B8 <>6;82C :C2B>@=>5=4>20=> C @07V =5>1EV4=>ABV ?@>2>48B8 701V@ :@>2V C <<5=B =0928I>W 0:B82=>ABV
?@5?0@0BC ('@C=BCNG8AL =0 =0O2=8E 40=8E), B>1B> ?@81;87=> G5@57 4 3>48=8 ?VA;O ?@>2545==O B@5BL>W V=T:FVW, O:I> ;V:0@AL:89
70AV1 22>48B8 C 283;O4V ?V4H:V@=8E V=T:FV9 2 @078 =0 4>1C.
8B0==O ?@> ?@>2545==O ?>2B>@=8E 4>A;V465=L 0=B8-%0 0:B82=>ABV 7 <5B>N 287=0G5==O @V2=V2 35?0@8=C 2 :@>2V, =0?@8::04, G5@57
:>6=V 2 G8 3 4=V, A;V4 28@VHC20B8 V=482V4C0;L=>, 70;56=> 2V4 @57C;LB0BV2 ?>?5@54=L>3> 4>A;V465==O. !;V4 B0:>6 @>73;O=CB8
<>6;82VABL :>@83C20==O 4>78 .
=B8-%0 0:B82=VABL, I> A?>AB5@V30TBLAO, 70;568BL 2V4 284C B0 @5687C20==O.
0 V=D>@<0FVTN, I> '@C=BCTBLAO =0 VA=CN8E 40=8E, A5@54=T 7=0G5==O (± AB0=40@B=5 2V4E8;5==O), O:5 A?>AB5@V30;>AO G5@57 4
3>48=8 ?VA;O 7-W V=T:FVW 5=>:A0?0@8=C C 4>7V 100 0=B8-%0 /3/=0 V='T:FVN 2 @078 =0 4>1C AB0=>28;> 1,20 ± 0,17 0=B8-%0 /<;.
&5 A5@54=T 7=0G5==O 1C;> @>7@0E>20=5 C ;V=VG=8E 4>A;V465==OE, ?V4 G0A O:8E 282G5==O 0=B8-%0 0:B82=>ABV ?@>2>48;8 E@>35==8<
(0;VB8G=8<) <5B>4>
>=B@>;L 0:B82>20=>3> G0AB:>2>3> B@><I>?;0AB8=>2>3> G0AC (""). 5O:V A?@8G8=ONBL ?>:07=8:0 ""'. A:V;L:8 ;V=VG=5 7=0G5==O FL>3>
B5ABC =5 2AB0=>2;5=5, B> =5<0T =5>1EV4=>ABV ?@>2>48B8 <=>VB>@8=3 ;V:C20==O 7 9>3> C@0EC20==O
! ?V=0;L=0/5?V4C@0;L=0 0=5AB57VO C ?0FVT=BV2, O:V>B@8DV;0:B8G=5 ;V:C20==O.
/: V V=HV 0=B8:>03C;O=B8, ?@8 70AB>AC20==V ?V4 G0A A?V=0;L=>W/5?V4C@0;L=>W 0=5AB57VW C @V4:VA=8E 28?04:0E <>6CBL ?@872>48B8
4> 28=8:=5==O 35<0B><8 A?8==>3> <>7:C B0 4>23>B@820;>3> 01> ?>ABV9=>3> ?0@0;VGC.
878: A?V=0;L=>W 35<0B><8 T 28I8< C 28?04:C 5?V4C@0;L=>W 0=5AB57VW V7 70AB>AC20==O< :0B5B5@0 ?>@V2=O=> 7V A?V=0;L=>N
0=5AB57VTN.
878: F8E @V4:VA=8E O28I <>65 7@>AB0B8 ?@8 B@820;>?5@0FV9=>@8AB0==V 5?V4C@0;L=8E :0B5B5@V2.
>;8 ;V:0@ ?@89<0T @VH5==O ?@> ?@87=0G5==O 0=B8:>03C;O=BV2 =0 B;V ?@>2545==O 5?V4C@0;L=>W/A?V=0;L=>W 0=5AB57VW, =5>1EV4=0
=04728G09=0 ?8;L=VABL B0 ?>ABV9=89 :=B@>;L 4;O 28O2;5==O 1C4L-O:8E A8>3VG=8E ?>@CH5=L, B0:8E O: 1V;L ?> A5@548==V9 ;V=VW A?8=8,
?>@CH5==O GCB;828E B0 @CE>28E DC=:FV9 (>=V A;01:VABL =86=VE :V=FV2>.), 48ADC=:FVO :8H5G=8:C B0/01> A5G>2>3> 0FVT=BV2
=5>1EV4=> ?>?5@548B8 ?@> =5>1EV4=VABL =5309=> ?>2V4<;OB8 A2>3> ;V:0@O ?@> 28=8:=5==O C =8E 1C4L-O:8E 7 28I5=0720=8E A8
?V4>7@NTBLAO A?V=0;L=0 35<0B><0, =5>1EV4=> @>7?>G0B8 =52V4::04=V 4V03=>AB8G=V B0 ;V:C20;L=V 70E>48, 2 B>3> <>7:C.
/:I> ?5@54>?5@0FV9=5 ;V:C20==O T =5>1EV4=8< (?0FVT=B8, O:V 4>2389 G0A ?@8:CBV 4> ;V6:0, B@02<0) B0 O:I> :=@8ABL 2V4 W
/@53V>=0;L=>W A?V=0;L=>W 0=5AB57VW 1C;0 @5B5;L=> 72065=0, ?0FVT=B0<, O:V >B@8<0;8 ?5@54 >?5@0FVTN V=T:FVW , <>65 ?@>2>48B8AO
B0:0 0=5AB57VO, 70 C<>28, I> 12 3>48=
5:>5=4CTBLAO @5B5;L=89 <=>VB>@8=3 =52@>;>3VG=>3> AB0BCAC ?0FVT=B0, ?0<OB0NG8 ?@> @878: 35<0B><8 A?8==>3> <>7:C.
0965 C 2AVE ?0FVT=BV2 ?@>DV;0:B8G=5 ;V:C20==O<>6=0 @>7?>G8=0B8 G5@57 6-8 3>48= ?VA;O 0=5AB57VW 01> 2840;5==O :0B5B5@0, 7
:=B@>;5< =52@>;>3VG=>3> AB0BCAC.

A>1;82> >15@56=8<8 A;V4 1CB8 ?@8 >4=>G0A=> (7>:@5<0 =5AB5@>W4=8<8 ?@>B870?0;L=8<8 70A>10<8, 0F5B8;A0;VF8;>2>N :8A;>B>N).
!8BC0FVW, O:V AC?@>2>46CNBLAO ?52=8< @878:> >=B@>;L 70 ?@>2545==O< ;V:C20==O =5>1EV4=> ?V428I8B8 C B0:8E 28?04:0E:

- ?>@CH5==O DC=:FVW ?5GV=:8;
- 28@07:>20 E2>@>10 H;C=:>2>.:8H:>2>3> B@0:BC 01> 1C4L-O:5 V=H5 >@30=VG=5 C@065==O 7 V<>2V@=VABN 28=8=:5==O :@>2>B5GV;
- AC48==5 E>@V>@5B8=0;L=5 70E2>@N20==O;
- ?VA;O EV@C@3VG=>3> 2B@CG0==O =0 3>;>2=> A?8==>
- ?>?5@5:>20 (;N<10;L=0) ?C=:FVO, >A:V;L:8 VA=CT @878: 2=CB@VH=L>W A?8==>7:>2>W :@>2>B5GV, O:I> <>6;82>, ?@>2545==O ?C=:FVW
A;V4 2V4::0AB8;

- ?@8 >4=>G0A=>(482. @>74V; «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»)).
%>G0 2AV :>=F5=B@0FVW @V7=8E =87L:>>;5:C;O@=8E 35?0@8=V2 28@060NBLAO C 4=8E >48=8FOE () 0=B8-Xa 0:B82=>ABV, WE=O
5D5:B82=VABL ?>2O70=0 =5 ;8H5 7 WE 0=B8-Xa 0:B82=VABN. @=>3> @5687C20==O =0 V=H89 <>65 1CB8 =5157?5G=>N, >A:V;L:8 :>65= @568< 1C2
28?@>1C20=89 C A?5FV0;L=8E ;;V=VG=8E 4>A;V465==OE. ">1EV4=0 25;8:0 >15@56=VABL V 4>B@8<0==O V=AB@C:FV9 4;O 70AB>AC20==O
:>6=>3> ?@5?0@0BC.

0AB5@565==O.
878: :@>2>B5GV !;V4 4>B@8<5=4>20=8E @5687C20==O (4>7C20==O V B@820;VABL ;V:C20==O). 54>B@8<0==O F8E @5:><5=40FV9 <>65
?@8725AB8 4> 28=8=:5==O :@>2>B5GV, >A>1;82> C E2>@8E 7 3@C?8 ?V428I5=>3> @878:C (?0FVT=B8 ;VB=L>3> 2V:C, E2>@V 7 ?>@CH5==O
DC=:FVW =8@>:).

8?04:8 A5@9>7=>W :@>2>B5GV A?>AB5@V30;8AO:
- C ?0FVT=BV2 ;VB=L>3> 2V:C, 7>:@5<0 2=0A;V4>: 2V:>2>3> ?>3V@H5==O DC=:FVW =8@>;
- C ?0FVT=BV2 7 ?>@CH5==O< DC=:FVW =8@>;
- O:I> <0A0 BV;0 AB0=>28BL<5=H5 40 :3;
- O:I> B5@0?VO ?@>2>48BLAO 4>2H5 @5:><5=4>20=>3> B5@28BL 10 4=V2;
- ?@8 =528:>=0==V B5@0?52B8G=8E @5:><5=40FV9, 7>:@5<0 I>4> B@820;>ABV ;V:C20==O B0 :>@5:FVW ;V:C20;L=8E 4>7 7 C@0EC20==O< <0A8
BV;0;
- ?@8 >4=>G0A=>482. @>74V; «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»)).
=T:FVW 5=>:A0?0@8=C, O: V 1C4L-O:>3> V=H>3> 0=B8:>03C;O=BC, =5>1EV4=> 70AB>A>2C20B8 7 >15@56=VABN ?@8 AB0=0E, 4;O O:8E 2;0AB820
?V428I5=0 V<>2V@=VABL 28=8=:5==O :@>2>B5G, B0:8E O: ?>@CH5==O 35<>AB07C, =0O2=VABL ?5?B8G=>W 28@07:8 2 0=0<=57V, =5I>402=>
?5@5=5A5=89 VH5=B@>;L>20=0 0@B5@V0;L=0 3V?5@B5=7VO, 4V015B8G=0 @5B8=>?0BVO, =5I>402=> ?5@5=5A5=5 =59@>EV@C@3VG=5 01>
>DB0;L<>;>3VG=5 EV@C@3VG=5 2B@CG0==O.
1C4L-O:>1EV4=> @5B5;L=> :>=B@>;N20B8 AB0= ?0FVT=BV2 ;VB=L>3> 2V:C B0/01> E2>@8E V7 =8@>2>N =54>AB0B=VABN, 0 B0:>6 O:I>
;V:C20==O B@820T 1V;LH5 10 4=V2.
=0;V7 =0 287=0G5==O 0=B8-%0 0:B82=>ABV C 45O:8E 28?04:0E <>65 1CB8 :>@8A=8< 4;O 28O2;5==O :C (482. @>74V; «A>1;82>ABV
70AB>AC20==O»)).

878: 28=8=:5==O 35?0@8=-V=4C:>20=>W B@><1>F8B>?5=VW (").
/I> C ?0FVT=B0, O:89 >B@8DV;0:B8G=8E 4>70E), 28=8=:5 B@><1>5<1>;VG=5 CA::04=5==O:
- ?>3V@H5==O ?5@51V3C B@><1>7C, ;V:C20==O O:>3> ?@>2>48BLAO,
- D;51VB,
- B@><1>5<1>;VO ;535=52>W 0@B5@VW,

- 3>AB@0 VH5;
- V=D0@:B :0@40 G8 VH5
702648 A;V4 ?0>OB0B8 ?@> V<>2V@=VABL 28=8:=5==O " B0 =5309=> 287=0G8B8 :V;L:VABL B@<>1>F8BV2 (482. @>74V; «A>1;82>ABV
70AB>AC20==O»).

@>F54C@8 @520A:C;O@870FVW :>@>=0@=8E 0@B5@V9. ;O >1<565==O @878:C @>728B:C :@>2>B5GV C ?0FVT=BV2, O:8< ?@>2>48BLAO
0=3V>?;0AB8:0 :>@>=0@=8E 0@B5@V9 7 <5B>N ;V:C20==O =5AB01V;L=>W AB5=>:0@4VW, V=D0@:BC:0@40 157 7C1FO Q 01> 3>AB@>3>
V=D0@:BC :0@40 7 ?V49><> A53<5=B0 ST, A;V4 B>G=> 4>B@8<5=4>20=8E ?@>1EV4=> 2840;8B8 G5@57 6 3>48= ?VA;O >AB0==L>3>
?V4H:V@=>3>/2=CB@VH=L>25==>3> 22545==O 5=>:A0?0@8=C. @8 ?@>4>265==V ;V:C20==O V7 70AB>AC20==O< 5=>:A0?0@8=C =0ABC?=C
V=T:FVN A;V4 @>18B8 =5 @0=VH5 =V6 G5@57 6-8 3>48= ?VA;O 2840;5==O ?@>2V4=8:0. 5>1EV4=> A?>AB5@V30B8 70
002=VABL <5E0=VG=8E ;:0?0=V2 A5@FO 7V HBCG=8E <0B5@V0;V2. 0AB>AC20==O 5=>:A0?0@8=C 4;O ?@>DV;0:B8:8 B@<>1>5<1>;VG=8E
CA;:04=5=L C ?0FVT=BV2, O:V <0NBL <5E0=VG=V HBCG=V ;:0?0=8 A5@FO, A?5FV0;L=> =5 4>A;V46C20;>AO.
@>B5 C ?0FVT=BV2 7 ?@>B57>20=8<8 ;:0?0=0<8 A5@FO, O:V >B@85=>:A0?0@8= 7 <5B>N ?@>DV;0:B8:8 B@<>1>5<1>;VG=8E CA;:04=5=L, 2 >:@5
<8E 28?04:0E A?>AB5@V302AO B@<>1>7.
03VB=V 6V=:8. # ;:V=VG=>A;V465==V 7 CG0ABN 203VB=8E 6V=>: 7 <5E0=VG=8<8 HBCG=8<8 ;:0?0=0<8 A5@FO, O:V >B@85=>:A0?0@8= C 4>7V
100 0=B8-Xa /:3 42VGV =0 4>1C 7 <5B>N 7=865==O @878:C B@<>1>5<1>;VG=8E CA;:04=5=L, C 2 7 8 6V=>: @>728=C2AO B@<>1>7, O:89 ?@872V2
4> >1AB@C:FVW ;:0?0=0 V ;5B0;L=>3> =0A;V4:C <0B5@V B0 48B8=8. "0:>6 C ?5@V>4 ?VA;O@5TAB@0FV9=>3> =03;04C =04E>48;8 ?>2V4<;5==O
?@> ?>>48=>:V 28?04:8 B@<>1>7C C 203VB=8E 6V=>: 7 ?@>B57>20=8<8 ;:0?0=0<8 A5@FO, O:V >B@85=>:A0?0@8= 7 <5B>N ?@>DV;0:B8:8 B@<>
<1>5<1>;VG=8E CA;:04=5=L. "0:8< G8=><, @878: B@<>1>5<1>;VG=8E CA;:04=5=L C F8E ?0FVT=BV2 <>65 1CB8 28I8
548:0<5=B>7=0 ?@>DV;0:B8:0.
28?04:C 3>AB@>3> 5?V7>4C V=D5:FV9=>3> 01> @52<0B8G=>3> 70E2>@N20==O ?@>DV;0:B8G=0 B5@0?VO 28?@0240=0 ;8H5 70 C<>28
=002=>ABV B0:>6 E>G0 1 >4=>3> 7 =0ABC?=8E D0:B>@V2 @878:C @>728B:C 25=>7=>W B@<>1>5<1>;VW:
- 2V: AB0@H5 75 @>:V2,
- >=:>;>3VG=5 70E2>@N20==O,
- 25=>7=0 B@<>1>5<1>;VO 2 0=0<=57V,
- >68@V==O,
- B5@0?VO 7 70AB>AC20==O< 3>@<>=V2,
- A5@F520 =54>AB0B=VABL,
- E@>=VG=0 48E0;L=0 =54>AB0B=VABL.
>A2V4 70AB>AC20==O FL>3> ?@5?0@0BC 7 <5B>N <548:0<5=B>7=>W ?@>DV;0:B8:8 C ?0FVT=BV2 2V:< AB0@H5 80 @>:V2 7 <0A>N BV;0 <5=H5
40 :3 =0@07V 4C65 >1<565=89.
@>2>B5GV C ;N459 ;VB=L>3> 2V:C # ;N459 ;VB=L>3> 2V:C =5 2V47=0G0TBLAO ?V428I5=>W B5=45=FVW 4> :@>2>B5G C <560E
?@>DV;0:B8G=>3> 4V0?07>=C 4>7. 0FVT=B8 ;VB=L>3> 2V:C (>A>1;82> ?0FVT=B8 2V:< 2V4 80 @>:V2) <0NBL ?V428I5=89 @878: CA;:04=5=L,
?>2O70=8E 7 :@>2>B5G0<8, 2 B5@0?52B8G=>=V 4>7. @8 ;V:C20==V 3>AB@>3> V=D0@:BC:0@40 7 5;520FVTN A53<5=B0 ST (STEMI) 71V;LH5==O
:V;L:>ABV :@>2>B5G 2V47=0G0;>AO C ?0FVT=BV2 2V:< 2V4 65 4> 75 @>:V2, 2:07CNG8 =0 B5, I> FV ?0FVT=B8 <0NBL ?V428I5=89 @878:
:@>2>B5G. 5:><5=4CTBLAO @5B5;L=89 ;:V=VG=89 <=>VB>@8=3 (B0:>6 482. @>74V;8 <!>AV1 70AB>AC20==O B0 4>78» B0 «\$0@<0>:V=5B8:0»).

>@CH5==O DC=:FVW =8@>:. 0FVT=B8 7 ?>@CH5==O< DC=:FVW =8@>: ?V4?040NBL ?V4 71V;LH5=89 2?;82 5=>:A0?0@8=C, I> ?V428ICT @878:
:@>2>B5G. A:V;L:8 2?;82 5=>:A0?0@8=C ACBBT2> ?V428ICTBLAO C ?0FVT=BV2 7 BO6:>N =8@>:2>N =54>AB0B=VABN (;V@5=A :@50B8=V=C < 30
<:/E2), B> @5:<5=4CTBLAO :>@5:FVO 4>78 2 B5@0?52B8G=>DV;0:B8G=>=V 4>7. %>G0 =5<0T @5:<5=40FV9 AB>A>2=> :>@5:FVW 4>78 C

?0FVT=BV2 7 ?>@CH5==O< DC=:FVW =8@>: A5@54=L>3> (;V@5=A :@50B8=V=C 30-50</E2) B0 ;53:>3> ABC?5=O (;V@5=A :@50B8=V=C 50-80<; /E2), @5:>5=4CTBLAO 74V9A=N20B8 @5B5;L=89 ;;V=VG=89 <=>VB>@8=3 (B0:>6 482. @>74V;8 <!>AV1 70AB>AC20==O B0 4>78» B0 «\$0@ <0:>:V=5B8:0»). 0=V I>4> ;V:C20==O 3>AB@>3> V=D0@:BC :0@40 7 5;520FVTN A53<5=B0 ST (STEMI) C ?0FVT=BV2 7 @V2=O<8 :@50B8=V=C 28I5 220 B0 175

87L:0 <0A0 BV;0. # 6V=>: 7 =87L:>N 203>N (<45 :3) B0 G>;>2V:V2 7 =87L:>N 203>N (<57 :3) 2V47=0G02AO 71V;LH5=89 2?;82 5=>:A0?0@8=C C ?@>DV;0:B8G=>=V 4>7 (=5 :>@83C20;8AO 2V4?>2V4=> 4> 2038), I> G0AB8H5 <65 ?@872>48B8 4> 28=8:=5==O :@>2>B5G. "0:8< G8=><, @5:> <5=4CTBLAO 74V9A=N20B8 @5B5;L=89 ;;V=VG=89 <=>VB>@8=3 AB0=C F8E ?0FVT=BV2 (B0:>6 482. @>74V; «\$0@<0:>:V=5:0»).

>=VB>@8=3. FV=:0 @878:C B0 ;;V=VG=89 <=>VB>@8=3 =5>1EV4=V 4;O ?@>3=>7C20==O ?>B5=FV9=8E :@>2>B5G. 0728G09 =5<0T =5>1EV4=>ABV C 728G09=>6 <0NBL ?V428I5=89 @878: :@>2>B5G (=0?@8::04, C ?0FVT=BV2 7 ?>@CH5==O< DC=:FVW =8@>:, ?0FVT=BV2 ;VB=L>3> 2V:C B0 ?0FVT=BV2 7 <56>28<8 7=0G5==O<8 2038) 01> 0:B82=V :@>2>B5GV.

01>@0B>@=V 0=0;V78. # 4>70E, I> 70AB>A>2CNBL 4;O ?@>DV;0:B8:8 25=>7=>W B@<1>5<1>;VW, 5=>:A0?0@8= =0B@VN =5 2?;8202 ACBBT2=>=V =0 G0A :@>2>B5GV B0 7030;L=V 0=0;V78 73>@B0==O :@>2V, =V =0 03@530FVN B@<1>F8BV2 01> 7207C20==O DV1@8=>35=C 7 B@<1>F8B0 <8. @8 28I8E 4>70E <65 71V;LHC20B8AO "" (0:B82>20=89 G0AB:>289 B@<1>?;0AB8=>289 G0A) B0 '(0:B82>20=89 G0A 73>@B0==O). 1V;LH5==O "" B0 '=5 :>@5;NT ;V=V9=> 7V 71V;LH5=>N 0=B8B@<1>B8G=>N 0:B82=VABN 5=>:A0?0@8=C =0B@VN V, B0:8< G8=><, =5 T ?V4E>4OI8< V 4>AB>2V@=8< 4;O <=>VB>@8=3C 0:B82=>ABV 5=>:A0?0@8=C =0B@VN.

0AB>AC20==O C ?5@V>4 203VB=>ABV 01> 3>4C20==O 3@C44N.

03VB=VABL.

@>DV;0:B8G=5 ;V:C20==O C B@8<5AB@V. 0@07V VA=CT =54>AB0B=L> ;;V=VG=8E 40=8E, =0 ?V4AB02V O:8E<>6=0 1C;> 1>FV=8B8 <>6;82V B5@0B>35==V 01> D5B>B>:A8G=V 5D5:B8 5=>:A0?0@8=C ?@8 9>3> ?@>DV;0:B8G=>AC20==V ?V4 G0A ?5@H>3> B@8<5AB@C 203VB=>ABV. ">ABV ?>?5@546C20;L=>3> 70E>4C 5=>:A0?0@8= 1060=> =5 ?@87=0G0B8 7 ?@>DV;0:B8G=>N <5B>N 203VB=8< ?V4 G0A B@8<5AB@C. /:I> ?;0=CTBLAO 5?V4C@0;L=0 0=5AB57VO, ?@>DV;0:B8G=5 ;V:C20==O 35?0@8=< C @07V <>6;82>ABV A;V4 ?@8?8=8B8 I=>09?V7=VH5 70 12 3>48= ?5@54 0=5AB57VTN.

@>DV;0:B8G=5 ;V:C20==O C B0 B@8<5AB@0E. B8E =5G8A;5;L=8E 40=8E, O:V VA=CNBL=0 40=89 G0A I>4> ;;V=VG=>3> 70AB>AC20==O 5=>:A0?0@8=C 2 B0 B@8<5AB@0E 203VB=>ABV, =52V4<> ?@> O:VAL B5@0B>35==V 01> D5B>B>:A8G=V 5D5:B8 5=>:A0?0@8=C 2 ?@>DV;0:B8G=8E 4>70E. @>B5, I>1 >FV=8B8 9>3> 2?;82 70 F8E C<>2, A;V4 ?@>25AB8 4>40B:>2V 4>A;V465==O.

">2 B0 B@8<5AB@0E 203VB=>ABV A;V4 @>73;O40B8 ;8H5 C @07V =5>1EV4=>ABV.

/:I> ?;0=CTBLAO 5?V4C@0;L=0 0=5AB57VO, ?@>DV;0:B8G=5 ;V:C20==O 35?0@8=< ?@8 <>6;82>ABV A;V4 ?@8?8=8B8 I=>09?V7=VH5 70 12 3>48= ?5@54 0=5AB57VTN.

>4C20==O 3@C44N. A:V;L:8 01A>@1FVO C H;C=>2>-.8H:>2>2>=0@>465=8E T =5<>6;82>N 2 ?@8=F8?V, ;V:C20==O 5=>:A0?0@8=< =5 T ?@>B8?>:070=8< 6V=:0<, O:V 3>4CNBL 48B8=C 3@C44N.

40B=VABL 2?;820B8 =0 H284:VABL @50:FVW ?@8 :5@C20==V 02B>B@0=A?>@B< 01> V=H8<8 <5E0=V7<0<8.

@89>< ?@5?0@0BC =5 2?;820T =0 740B=VABL :5@C20B8 02B>B@0=A?>@B=8< 70A>1< B0 ?@0FN20B8 7 <5E0=V7<0<8. @>B5 A;V4 1CB8 >15@56=8<8 7 >3;O4C =0 <>6;82V ?>1VG=V @50:FVW (482. @>74V; «>1VG=V @50:FVW»).

!>AV1 70AB>AC20==O B0 4>78.

V4H:V@=89 H;OE 22545==O (:@V< ?0FVT=BV2, O:V ?5@51C20NBL =0 35<>4V0;V7V).

0AB>A>2C20B8 BV;L:8 4;O 4>@>A;8E ?0FVT=BV2.

&59 ;V:0@AL:89 70AV1 =5 4>72>;OTBLAO 22>48B8 2=CB@VH=L< O7>2>.

1 <; @>7G8=C 4;O V=T:FV9 5:2V20;5=B=89 ?@81;87=> 10 000 0=B8-Xa 5=>:A0?0@8=C.

"5E=V:0 ?V4H:V@=>3> 22545==O.

>?5@54=L> =0?>2=5=V H?@8F8 265 3>B>2V 4> 28:>@8AB0==O; ?CE8@5FL ?>2VB@O, O:89 .

=>:A0?0@8= 22>48B8 H;OE>< V=T:FVW C ?V4H:V@=C B:0=8=C, 1060=>, I>1 ?0FVT=B ?@8 FL>;>65==V. @5?0@0B 22>48B8 C 4V;O=:C

?5@54=L>1VG=>W 01> 704=L>1VG=>W ?>25@E=V G5@52=>W ABV=:8, G5@3CNG8 ?@0289 B0 ;V289 1V:

>.:C A;V4 22>48B8 =0 ?>2=C WW 4>268=C ?5@?5=48:C;O@=> (=5 71>:C) 4> ?>25@E=V A;:04:8 H:V@8, CB2>@5=>W 1EV4=> CB@8BO3<< CAVTW V=T:FVW.

030:L=V@5:><5=40FVW.

E>4V ;V:C20==O ?>B@V15= @53C;O@=89 :>=B@>;L :V;L:>ABV B@<<1>F8BV2, >A:V;L:8 VA=CT @878: @>728B:C35?0@8=-V=4C:>20=>W B@<<1>F8B>?5=VW (" (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

@>DV;0:B8G=5 ;V:C20==O 25=>7=8E B@<<1>5<1>;VG=8E CA::04=5=L C EV@C@3VW.

/: 7030;L=5 ?@028;>, FV @5:><5=40FVW AB>ACNBLAO EV@C@3VG=8E ?@>F54C@, O:V ?@>2>4OBLAO ?V4 7030;L=>N0=5AB57VTN.

28?04:C A?V=0;L=>W 5?V4C@0;L=>W 0=5AB57VW A;V4 72068B8 :>@8ABL 2V4 22545==O 5=>:A0?0@8=C ?5@54 >?5@0FVTN B0 B5>@5B8G=> ?V428I5=89 @878: @>728B:C A?V=0;L=>W 35<0B><8 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

!E5<0 22545==O. 2>48B8 1 V=T:FVN =0 4>1C.

>70. >7C <0T 287=0G0B8 =0 >A=>2V >FV=:8 @878:C, O:89 <0T :>=:@5B=89 ?0FVT=B, V 284C EV@C@3VG=>3> 2B@CG0==O.

%V@C@3VG=V >?5@0FVW, O:V AC?@>2>46CNBLAO ?>

V4 G0A >?5@0FV9, O:V AC?@>2>46CNBLAO ?>B0 C ?0FVT=BV2, O:V =5 <0NBL 28A>:>3> @878:C B@<<1>5<>1>;VW, 5D5:B82=0 ?@>DV;0:B8:0 70157?5GCTBLAO I>45==8< 22545==O< 2000 0=B8-Xa (0,2 <;). 568< 4>7C20==O, I> 1C2 4>A;V465=89, ?5@5410G0T 22545==O ?5@H>W V=T:FVW 70 2 3>48=8 4> >?5@0FVW.

%V@C@3VG=V >?5@0FVW, O:V AC?@>2>46CNBLAO 28A>:8< @878:>< B@<<1>CB2>@5==O.

?5@0FVW =0 :C;LH>2>;V==>10E.

>70 AB0=>28BL 4000 0=B8-Xa (0,4 <;) 1 @07 =0 4>1C.

568< 4>7C20==O, I> 1C2 4>A;V465=89, ?5@5410G0T 22545==O ?5@H>W V=T:FVW 4000 0=B8-Xa (?>2=0 4>70) 70 12 3>48= ?5@54 >?5@0FVTN 01> ?5@H>W V=T:FVW 2000 0=B8-Xa (?>;>28=0 4>78) 70 2 3>48=8 ?5@54 >?5@0FVTN.

=HV A8BC0FVW.

/:I> VA=CT ?V428I5=89 @878: 25=>7=>W B@<<1>5<1>;VW, ?>2O70=89 7 284<< EV@C@3VG=>3> 2B@CG0==O (>A>1;82> ?@8 >=:>;>3VG=8E >?5@0FVOE) B0/01> 7 0=0<=57>< ?0FVT=B0 (O:I> 2V= ?5@5=VA 28?04:8 25=>7=>W B@<<1>5<1>;VW), A;V4 22>48B8 B0:C A0DV;0:B8G=C 4>7C, O:V ?@8 >@B>?548G=8E >?5@0FVOE 7 28A>:8< @878:><, B0:8E O: >?5@0FVW =0 :C;LH>2>;V==>10E.

"@820;VABL ?@>DV;0:B8G=>3> ;V:C20==O.2545==O (=87L:><>;5:C;O@=8<8 35?0@8=0<8) A;V4 ?@>4>26C20B8, @07<< V7 =0;:040==O< 728G09=8E :>2O7>: =0 =>38 ?>:8 ?0FVT=B 7<>65 ?>2=>FV==> B 0:B82=> ?5@5AC20B8AO:

- ?@8 7030;L=8E >?5@0FV9=8E 2B@CG0==OE 70AB>AC20==O <0T B@820B8 <5=H5 10 4=V2, 4>:8 C ?0FVT=B0 VA=CT@878: @>728B:C 25=>7=>W B@<<1>5<1>;VW (482. @>74V; «A>1;82>ABV 70AB>AC20==O»);

- 1C;0 2AB0=>2;5=0 B5@0?52B8G=0 :>@8ABL ?@>DV;0:B8G=>3> ;V:C20==O 5=>:A0?0@8=<< C 4>7V 4000 0=B8-Xa /4>1C ?@>BO3<< 4-5 B86=V2 ?VA;O >?5@0FVW =0 :>;V==>1V;

- O:I> ?0FVT=B 2A5 I5 <0T @878: 25=>7=>W B@<<1>5<1>;VW ?VA;O @5:><5=4>20=>W B@820;>ABV ;V:C20==O, A;V4 @>73;O=CB8 <>6;82VABL ?@>4>265==O ?@>DV;0:B8G=>W B5@0?VW, 7>:@5<0 22545==O ?5@>@0;L=8E 0=B8:>03C;O=BV2.

!;V4 707=0G8B8, I> ;;V=VG=0 :>@8ABL 4>23>B@820;>3> ;V:C20==O =87L:>>;5:C;O@=8<8 35?0@8=0<8 01> ?5@>@0;L=8<8 0=B8>:03C;O=B0<8 =5 4>A;V46C20;0AO.

@>DV;0:B8:0 73>@B0==O :@>2V 2 A8AB5@?>@0;L=>3> :@>2>>1V3C ?@8 ?@>2545==V 35<>4V0;V7C.

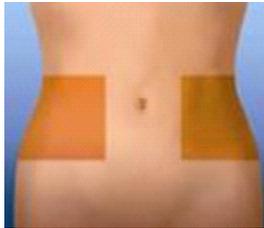
=CB@VH=L>AC48==89 H;OE 22545==O (C 2=CB@VH=L>0@B5@V0;L=89 :0B5B5@ 01> 4V0;V7=89 :>=BC@). ;O E2>@8E, O:V >B@82B>@=V A50=A8 35<>4V0;V7C, ?@>DV;0:B8:0 73>@B0==O :@>2V 2 5:AB@0@5=0;L=V9 A8AB5G8I5==O :@>2V 70157?5GCTBLAO 22545==O< ?>G0B:>2>W 4>78 100 0=B8-Xa /:3 C 2=CB@VH=L>0@B5@V0;L=89 :0B5B5@ 01> 4V0;V7=89 :>=BC@ =0 ?>G0B:C A50=AC. &N 4>7C 22>48B8 2=CB@VH=L>AC48==> C 283;O4V >4=>@07>2>W 1>;NA=>W V=T:FVW. =B8:>03C;O=B=>3> 5D5:BC FVTW 4>78, O: ?@028;>, 4>AB0B=L> 4;O ?@>2545==O A50=AC 35<>4V0;V7C, I> B@820T 4 3>48=8 01> <5=H5. W <>6=0 :>@83C20B8 7 C@0EC20==O< 7=0G=8E V=482V4C0;L=8E :>;820=L 2V4?>2V4V.

0:A8<0;L=0 @5:><5=4>20=0 4>70 AB0=>28BL 100 0=B8-Xa /:3.

;O 35<>4V0;V7=8E ?0FVT=BV2 7 3@C?8 28A>:>3> @878:C :@>2>B5GV (>A>1;82> ?@8 4V0;V7V C ?@5- V ?>AB>?5@0B82=>4V) 01> 7 0:B82=>N :@>2>B5G5N, ?V4 G0A A50=AV2 4V0;V7C<>6=0 70AB>A>2C20B8 4>7C 50 0=B8-Xa /:3 (?>42V9=89 AC48==89 4>ABC?) 01> 75 0=B8-Xa /:3 (>48= AC48==89 4>ABC?).

=AB@C:FVW I>4> A0<>ABV9=>3> 2545==O ?@5?0@0BC ;5:A0=® C H?@8F-4>7V 7 70E8A=>N A8AB5<>N 3>:;8

1. □8<8B8 @C:8 B0 4V;O=:C, C O:C 1C45 28:>=C20B8AO V=T:FVO ?@5?0@0BC, 2>4>N 7 <8;>
2. ?52=8B8AL C B> 4>1@5 284=> 48B8 ?@5?0@0B.
3. 1@0B8 4V;O=:C C ?@02V9 01> ;V2V9 G0AB8=V 682>B0. ?O=:0<0T 1CB8 2V440;5=0 (C =0?@O 1>:V2) 2V4 ?C?:0 I>=09<5=H5 =0 5 A0=B8<5B@V2.



4. C ?@02C B0 ;V2C AB>@>=8 682>B0, 70;56=> 2V4 B>3>, 2 O:C AB>@>=C 1C;> 7@>1;5=> V=T:FVN<8=C;>3> @07C. G8ABVB8 < 7V A?8@B>



5. 15@56=> 7=OB8 :>2?0G>: 7 3>;8, ?@8T4=0=>W 4> H?@8F0 7 ?@5?0@0B<< ;5:A0=®. 8:8=CB8 F59 :>2?0G>:. (?@8F T ?>?5@54=L> =0?>2=5=8< V 3>B>28< 4> 28:>@8AB0==O. =0B8A:0B8 =0 ?>@H5=L 4> 28:>=0==O V=T:FVWI>1 ?>71CB8AO 1C;L10H>: ?>2VB@O. &5 <>65 ?@8725AB8 4> 2B@0B8 ;V:0@AL:>3> 70A>1C. VA;O B>3>, O: 7=OB> :>2?0G>:, =5 4>?CA:0B8, I>1 3>;:0 B>@:0;0AO G>3>=51C4L. &5 =5>1EV4=> 4;O 70157?5G5==O B>3>, I> 3>;:0 1C45 70;8H0B8AO G8AB>N (AB5@8;L=>N).



6. "@8<0B8 H?@8F C @CFV B0:, O: >;V25FL ?@8 ?8ALN @C:>N 7;53:0 27OB8 >G8I5=C 4V;O=:C 682>B0 2:07V2=8< V 25;8:8< ?0;LFO<8, I>1 CB2>@8;0AO A:;04:0 H:V@8. 1>2'07:>2> CB@8BO3<< CAVTW V=T:FVW.



7. "@8<0B8 H?@8F B0:8< G8=><, I>1 3>;:0 1C;0 A?@O<>20=0 4>=87C (25@B8:0;L=> ?V4 :CB>< 90°). 25AB8 3>;:C C H:V@=C A:;04:C =0 ?>2=C 4>268=C.



8. 0B8A=CB8 ?>@H5=L H?@8F0 ?0;LF52O7:>2> CB@8BO3<< CAVTW V=T:FVW.

9. 25AB8 3>;:C, 28BO3CNG8 WW ?@O<> C 72>@>B=>;:0 02B<0B8G=> 2:@8TBLAO 70E8A=8< G>E;> 4@07C 6 28:8=CB8 H?@8F C =091;86G89 :>=B59=5@ 4;O 3>AB@8E ?@54<5BV2.

@8 70E8A=0 A8AB5<0, O:0 ?@872>48BL 4> CB2>@5==O 70E8A=>3> G>E;0, <>65 1CB8 0:B82>20=0 ;8H5 ?VA;O 28?>@>6=5==O H?@8F0 =0B8A:0==O< ?>@H=O 4> :V=FO.

:O C=8:=5==O CB2>@5==O A8=FO =5 @>7B8@0B8 .



VB8. '5@57 2V4ACB=VABL 2V4?>2V4=8E 40=8E =5 @5:>5=4CTBLAO 70AB>A>2C20B8 C ?54V0B@8G=V9 ?@0:B8FV.

5@54>7C20==O.

8?04:>25 ?5@54>7C20==O ?VA;O ?V4H:V@=>3> 22545==O 7=0G=8E 4>7 =87L:><;5:C;O@=>3> 35?0@8=C <>65 ?@8725AB8 4> ?>O28 35 <>@03VG=8E CA:;04=5=L.

@07V :@>2>B5GV 45O:8E ?0FVT=BV2 <>6=0 ;V:C20B8 ?@>B0<, ?@8 FL>2CNBL, I>:

- 5D5:B82=VABL ?@>B0=86G0, =V6 B0, I> A?>AB5@V30TBLAO ?@8 ?5@54>7C20==V =5D@0:FV>=>20=>3> 35?0@8=C;

- ?5@54 70AB>AC20==O< ?@>B0

59B@0;V70FVN ?@>2>48B8 H;OE<< ?>2V;L=>3> 2=CB@VH=L>25==>3> 22545==O ?@>B0 3V4@>E;>@84C).

5>1EV4=0 4>70 ?@>B0

- 22545=>W 4>78 =87L:><;5:C;O@=>3> 35?0@8=C (100 0=B835?0@8=>28E >48=8FL ?@>B0<>;5:C;O@=>3> 35?0@8=C), O:I> 5=>:A0?0@8= =0B@VN 22>48;8 ?@>BO3><>AB0==VE 8 3>48=;

- G0AC, I> <8=C2 ?VA;O V=T:FVW 35?0@8=C:

- V=DC7VN 50 0=B835?0@8=>28E >48=8FL ?@>B0:A0?0@8=C =0B@VN <>6=0 ?@>2>48B8, O:I> 5=>:A0?0@8= =0B@VN 22>48;8 1V;LH5 8 3>48= B> O:I> =5>1EV4=> 225AB8 4@C3C 4>7C ?@>B0

- O:I> 5=>:A0?0@8= 22>48;8 1V;LH5 12 3>48= B> =5>1EV4=>ABV C 22545==V ?@>B0

&V @5:><5=40FVW ?@87=0G5=V 4;O ?0FVT=BV2 7 =>@<0;L=>N DC=:FVTN =8@>:, O:V 70AB>A>2CNBL ?>2B>@=V 4>78 ?@5?0@0BC.

@>B5 ?>2=VABN =59B@0;V7C20B8 0=B8-%0 0:B82=VABL 5=>:A0?0@8=C =5>6;82>.

@V< B>3>, G5@57 >A>1;82>ABV 01A>@1FVW =87L:><;5:C;O@=>3> 35?0@8=C FO =59B@0;V70FVO <>65 1CB8 B82>N B0 28<030B8 @>7?>4V;C 7030;L=>W @>7@0E>20=>W 4>78 ?@>B0

?@8=F8?V 28=8:=5==O A5@9>7=8E =0A;V4:V2 ?VA;O?@89> =87L:><;5:C;O@=>3> 35?0@8=C 2=CB@VH=L>, =02VBL C 25;8:8E :V;L:>ABOE, T <0;>9<>2V@=8< (=5 A?>AB5@V30;>AO 6>4=>3> 28?04:C), >A:V;L:8 ABC?V=L 2A<>:BC20==O FVTW @5G>28=8 C H;C=:C B0 :8H5G=8:C T =57=0G=8

>1VG=V @50:FVW.

C;8 70@5TAB@>20=V 28?04:8 7=0G=8E 35<>@03VG=8E CA:;04=5=L, 45O:V 7 =8E 1C;8 ;5B0;L=8<8. 5G0AB8<8 ?>1VG=8<8 @50:FVO<8 1C;8

2=CB@VH=L>G5@5?=V B0 @5B@>?5@8B>=50;L=V :@>2>28;828. "0:>6 @5TAB@C20;8AO 28?04:8 35<>@03VG=8E CA:;04=5=L (:@>2>B5GV), B0:8E O: 35<0B><0, 5:EV<>7 C

5<>@03VG=V ?@>O28, A?@8G8=5=V ?5@5206=>:

- AC?CB=V<8 D0:B>@0<8 @878:C T >@30=VG=V C@065==O, ?@8 O:8E VA=CT V<>2V@=VABL 28=8:=5==O :@>2>B5GV, B0 45O:V :>1V=0FVW ;V:0@AL:8E 70A>1V2 (482. @>74V; «@>B8?>:070==O», «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»), 2V:, =0O2=VABL =8@:>2>W =54>AB0B=>ABV, <0;0 <0A0 BV;0;

- =528:>=0==O< B5@0?52B8G=8E @5:><5=40FV9, 0 A0<5: B@820;>ABV ;V:C20==O B0 :>@5:FVW 4>78 7 C@0EC20==O< <0A8 BV;0 ?0FVT=B0 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

>2V4><;O;>AO ?@> ?>>48=>:V 28?04:8 28=8:=5==O 35<0B><8 A?8==>3> <>7:C ?V4 G0A A?8==>7:>2>W 0=5AB57VW, 0=0;357VW 01>

5?V4C@0;L=>W 0=5AB57VW, I> ?@>2>48;8 ?VA;O 70AB>AC20==O =87L:><;5:C;O@=>3> 35?0@8=C. &V ?>1VG=V 5D5:B8 ?@872>48;8 4>

=52@>;>3VG=8E @>7;04V2 @V7=>3> ABC?5=O BO6:>ABV, 2;:NG=> V7 4>23>B@820;8< 01> ?>ABV9=8< ?0@0;VG5< (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

>6;825 28=8:=5==O 35<0B><8 C 2545==O ?V4H:V@=>W V=T:FVW.C;8 70@5TAB@>20=V 28?04:8 1>;N C B5@0?VW.

>2V4><;O;>AO ?@> 28?04:8 28=8:=5==O B@<>1>F8B>?5=VW. A=CT 420 WW B8?8.
"8? I, I> A?>AB5@V30TBLAO C 1V;LH>ABV 28?04:V2, 70728G09 T B@<>1>F8B>?5=VTN A5@54=L>W BO6:>ABV (1V;LH5 100 000<<3), O:0 28=8:0T
4> 5 4=O ;V:C20==O B0 =5 28<030T ?@8?8=5==O B5@0?VW.
"8? II - F5 @V4:VA=0 A5@9>7=0 V0;5@3VG=0 B@<>1>F8B>?5=VO (") 7 B@<>1>7><, C 45O:8E 28?04:0E B@<>1>7 1C2 CA::04=5=89 V=D0@:B0<8
>@30=V2 01> VH5:, WW ?>H8@5=VABL 70;8H0TBLAO =54>AB0B=L> 282G5=>N(482. @>74V; «A>1;82>ABV 70AB>AC20==O»).
>6;825 B0:>6 157A8<=5 B0 >1>@>B=5 ?V428I5==O :V;L:>ABV B@<>1>F8BV2.
C65 @V4:> ?>2V4><;O;>AO ?@> 28=8:=5==O =5:@>7C H:V@8 C 35?0@8=C. >O2V F8E O28I <>65 ?5@54C20B8 28=8:=5==O ?C@?C@8 01>
V=DV;LB@>20=8E B0 1>;VA=8E 5@8B5<0B>7=8E 1;OH>:. # B0:8E 28?04:0E B5@0?VN A;V4 =5309=> ?@8?8=8B8.
8=8:0;8 =5G0ABV ?@>O28 A8AB5<=8E 0;5@3VG=8E @50:FV9 (0=0DV;0:B8G=V/0=0DV;0:B>W4=V @50:FVW, 2;;NG0NG8 H>:) 01> @50:FV9 7 1>:C
H:V@8 (:@>?82O=:0, A25@1V6, 5@8B5<0, 1C;L>7=V 28A8?0==O), O:V C ?52=8E 28?04:0E <>3;8 ?@872>48B8 4> ?@8?8=5==O ;V:C20==O.
/: V C 28?04:C 70AB>AC20==O =5D@0:FV>=>20=8E 35?0@8=V2, ?@8 B@820;>>AB5>?>@>7C.
5D@0:FV>=>20=V 35?0@8=8 <>6CBL A?@8G8=OB8 3V?>0;L4>AB5@>=V7<, O:89 ?@872>48BL 4> 71V;LH5==O ?;07<>28E @V2=V2 :0;VN. V4:> <>65
28=8:=CB8 ;;V=VG=> 7=0GCI0 3V?5@:0;VTA>1;82> C ?0FVT=BV2 7 E@>=VG=>N =8@:>2>N =54>AB0B=VABN B0 FC:@>28< 4V015B>
>2V4><;O;>AO ?@> 28?04:8 B@0=78B>@=>3> ?V428I5==O @V2=V2 B@0=A0F5;N;O@=>3> 01> E>;5AB0B8G=>3> C@065==O ?5GV=:8.
>2V4><;O;>AO ?@> 45:V;L:0 28?04:V2 @>728B:C 3V?5@:0;VT
>2V4><;O;>AO ?@> 28=8:=5==O 3>;>2=>3> 1>;N, 0;>?5FVW.
C65 @V4:> A?>AB5@V30;8AO 28?04:8 20A:C;VBC, ?>2'O70=>3> 7 ?V428I5=>N GCB;82VABN H:V@8.
!>AB5@V30;0AO 3V?5@5>78=>DV;VO C 4C65 @V4:VA=8E 28?04:0E01> >4=>G0A=> 7V H:V@=8<8 @50:FVO<8, ?@872>4OG8 4> ?@8?8=5==O
;V:C20==O.

"5@ABV.3 @>:8.

#<>28 715@V30==O. 15@V30B8 C =54>ABC?=>. 5 70<>@>6C20B8.

#?0:>2:0. 10 (2E5): ?> 0,2 <; C H?@8F-4>7V 7 70E8A=>N A8AB5<>N 3>;:8, ?> 2 H?@8F-4>78 C 1;VAB5@V; ?> 5 1;VAB5@V2 C :0@B>==V9 :>@>1FV.

0B53>@VO 2V4?CA:C. 0 @5F5?B>

8@>1=8:!. !0=>DV V=B@>? =40AB@V0, \$@0=FVO.

VAf57=0E>465==O 28@>1=8:0 B0 9>3> 04@5A0 20465==O 4VO;L=>ABV.

180 @N 0= >@5A 94700 -, \$, \$@0=FVO.

01>

C;L20@ =4CAB@VT;L @><8A;>20 7>=0 76580 □L> "@5, \$@0=FVO.

002=8:."«!0=>DV-25=BVA #: @0W=0», #: @0W=0.

=AB@C:FVO 4;O H?@8F-4>78 4000 0=B8-%

!,:04:

4VNG0 @5G>28=0: 5=>:A0?0@8=
1 <; @>7G8=C 100 <3 5=>:A0?0@8=C =0B@VN;
1 H?@8F-4>70
4>?>28=0: 2>40 4;O V=T:FV9.

V:0@AL:0 D>@<0. >7G8= 4;O V=T:FV9.

A=>2=V DV78:>-EVABV: 15710@2=89 01> 1;V4>-6>2B>3> :>;L>@C, ?@>7>@89 @>7G8=.

\$0@<0:>B5@0?52B8G=0 3@C?0. □=B8B@><1>B8G=V 70A>18. @C?0 35?0@8=C. >4 ""% 0105.

\$0@<0:>;>3VG=V 2;0AB82>ABV.

\$0@<0:>48=0

=>:A0?0@8= T =87L:><>;5:C;O@=8< 35?0@8=><, C O:>3> 0=B8B@><1>B8G=0 B0 0=B8:>03C;O=B=0 0:B82=VABL AB0=40@B=>3> 35?0@8=C =5
>2O70=V 1>N. >:0 0=B8-%0 0:B82=VABL, =V6 0=B8-0 01> 0=B8B@><1V=>20 0:B82=VABL. ;O 5=>:A0?0@8=C A?V22V4=>H5==O F8E 42>E 284V2
0:B82=>ABV AB0=>28BL 3,6.

?@>DV;0:B8G=8E 4>70E 2V= =5 <0T 7=0G=>W 4VW =0 "".

0 ?V:C 0:B82=>ABV ;V:C20;L=8E 4>7 ""<>65 1CB8 2 1,5-2,2 @070 1V;LH5 :=B@>;L=>3> G0AC. &5 ?>4>265==O 2:07CT =0 70;8H:>2C 0=B8B@>
<1V=>2C 4VN.

\$0@<0:>:V=5B8:0.

\$0@<0:>:V=5B8G=V ?>:07=8:8 5=>:A0?0@8=C >FV=N20;8 =0 ?V4AB02V B@820;>ABV 0=B8-%0 B0 0=B8-0 0:B82=>ABV C ?;072V ?@8 @5:>
<5=4>20=8E 4>70E (20;V4>20=V 0;VB8G=V <5B>48) ?VA;O >4=>:@0B=>3> B0 ?>2B>@=>3> ?V4H:V@=>3> 22545==O B0 ?VA;O >4=>:@0B=>W
2=CB@VH=L>25==>W V=T:FVW.

V>4>ABC?=VABL. =>:A0?0@8=, I> 22>48BLAO ?V4H:V@=>, H284:> B0 <0965 ?>2=VABN 2A<>:BCTBLAO (?@81;87=> =0 100%). 0:A8<0;L=0
0:B82=VABL C ?;072V A?>AB5@V30TBLAO G5@57 3-4 3>48=8 ?VA;O 22545==O. "0:0<0:A8<0;L=0 0:B82=VABL (I> 28@065=0 C 0=B8-%0)

AB0=>28BL 0,18±0,04 (?VA;O 2000 0=B8-%0), 0,43±0,11 (?VA;O 4000 0=B8-%0) ?@8 ?@>DV;0:B8G=>
>;NA=0 2=CB@VH=L>25==0 V=T:FVO 3000 0=B8-%0 7 ?>40;LH8<8 ?V4H:V@=8<8 V=T:FVO<8 ?> 100 0=B8-%0 /:3 :=6=V 12 3>48= ?@872>48BL 4>
4>AO3=5==O ?5@H>3> <0:A8<0;L=>3> @V2=O :=F5=B@0FVW 0=B8D0:B>@0 %0, I> AB0=>28BL 1,16 /<; (n=16), B0 A5@54=L>3> ?>:07=8:0 ?;>IV
?V4 D0@<0:>:V=5B8G=>N :@82>N, I> 2V4?>2V40T 88 % @V2=>206=>3> @V2=O. V2=>206=89 AB0= 4>AO30TBLAO =0 4@C389 45=L ;V:C20==O.
<560E @5:><5=4>20=8E 4>7 D0@<0:>:V=5B8:0 5=>:A0?0@8=C T ;V=V9=>N. =CB@VH=L>-V=482V4C0;L=0 B0 2B>@=8E ?V4H:V@=8E 22545=L
74>@>28< 4>1@>2>;LFO< 4000 0=B8-%0 1 @07 =0 4>1C @V2=>206=89 AB0= 4>AO30TBLAO =0 2-9 45=L, ?@8 FL:>:A0?0@8=C ?@81;87=> =0 15 %
28I0, =V6 ?VA;O >4=>:@0B=>W 4>78. V25=L 0:B82=>ABV 5=>:A0?0@8=C C @V2=>206=> 65 % 28I89, =V6 ?VA;O >4=>:@0B=>W 4>78, 0<0:A8
<0;L=89 B0 2V ?VA;O ?V4H:V@=>3> 22545==O ?@81;87=> 2 10 @07V2 =86G0 70 0=B8-%0 0:B82=VABL. !5@54=O<0:A8<0;L=0 0=B8-0 0:B82=VABL
A?>AB5@V30TBLAO ?@81;87=> G5@57 3-4 3>48=8 ?VA;O ?V4H:V@=>W V=T:FVW B0 4>AO30T 0,13 0=B8-0 <; ?@8 ?>2B>@=8E 22545==OE 4>78
100 0=B8-%0 /:3 2 @078 =0 4>1C.

\$0@<0>:V=5B8G=>W 270T<>4VW :A0?0@8=>< B0 B@><1>;VB8G=8< 70A>1>< ?@8 >4=>G0A=>AB5@V30;>AO.
>7?>4V.; 1□T< @>7?>4V;C 0=B8-%0 0:B82=>ABV 5=>:A0?0@8=C AB0=>28BL ?@81;87=> 5 ;VB@V2 V T =01;865=8< 4> >1T2V.
5B01>;V7 =>:A0?0@8= <5B01>;V7CTBLAO ?5@5206=> C ?5GV=FV (45AC;LD0B870FVO, 45?>;V<5@870FVO).
82545==O. VA;O ?V4H:V@=>3> 22545==O ?5@V>4 =0?V2282545==O 0=B8-%0 0:B82=>ABV C =87L:><;5:C;O@=8E 35?0@8=V2 28I89, =V6 C
=5D@0:FV>=>20=8E 35?0@8=V2.
=>:A0?0@8=C 2;0AB825 <>=>D07=5 282545==O 7 ?5@V>4>< =0?V2282545==O ?@81;87=> 4 3>48=8 ?VA;O ?V4H:V@=>3> 22545==O
>4=>:@0B=>W 4>78 V ?@81;87=> 7 3>48= ?VA;O 22545==O ?>2B>@=8E 4>7.
=87L:><;5:C;O@=>3> 35?0@8=C 0=B8-0 0:B82=VABL C ?;072V 7=86CTBLAO H284H5, =V6 0=B8-%0 0:B82=VABL.
=>:A0?0@8= B0 9>3> <5B01>;VB8 282>4OBLAO G5@57 =8@:8 (=5=0A8GC20=89 <5E0=V7<) V 6>2G>282V4=V H;OE8.
8@:>289 ;V@5=A D@03<5=BV2, I> <0NBL 0=B8-%0 0:B82=VABL, AB0=>28BL ?@81;87=> 10 % 2V4 22545=>W 4>78, 0 7030;L=0 =8@:>20
5:A:@5FVO 0:B82=8E B0 =50:B82=8E @5G>28= 40 % 4>78.
@C?8 28A>:>3> @878:C.
0FVT=B8 ;VB=L>3> 2V:C. 82545==O C?>2V;L=5=5 G5@57 DV7V>;>3VG=> 7=865=C DC=:FVN =8@>: C FV9 3@C?V. &O 77C20==O B0 @568<
22545==O ?@8 ?@>DV;0:B8G=V9 B5@0?VW, O:I> =8@:>20 DC=:FVO C B0:8E E2>@8E 70;8H0TBLAO C ?@89=OB=8E <560E, B>1B> :>;8 2>=0 ;8H5
B@>E8 7=865=0.
5@54 ?>G0B:>< ;V:C20==O C E2>@8E 2V:> 2V4 75 @>:V2 =5>1EV4=> A8AB5<0B8G=> >FV=N20B8 DC=:FVW =8@>: 70 D>@N >:@>DB0 (482.
@>74V; «A>1;82>ABV 70AB>AC20==O».
5<>4V0;V7. 87L:><;5:C;O@=89 35?0@8= 22>48B8 2 0@B5@V0;L=C <03VAB@0;L :=BC@C 4;O 35<>4V0;V7C C 2V4?>2V4=8E 4>70E 7 <5B>N
70?>1V30==O B@><1>CB2>@5==N C A8AB5
\$0@<0>:V=5B8G=V ?0@0<5B@8 C ?@8=F8?V 70;8H0NBLAO =57N =8@:>2>N =54>AB0B=VABN.

;V=VG=V E0@0:B5@8AB8:8.

>:070==O.

@>DV;0:B8:0 25=>7=>W B@><1>5<1>;VW ?@8 EV@C@3VG=8E 2B@CG0==OE, O:V AC?@>2>46CNBLAO ?>
@>DV;0:B8:0 B@><1>7C 3;81>:8E 25= C ?0FVT=BV2, O:V ?5@51C20NBL =0 ?>ABV;L=>AB@8<8 B5@0?52B8G=8<8 70E2>@N20==O<8:
- A5@F52>N =54>AB0B=VABN (III 01> IV ;;0A 70 ;;0A8DV:0FVTN NYHA);
- 3>AB@>N 48E0;L=>N =54>AB0B=VABN;
- 3>AB@8< V=D5:FV9=8< 01> @52<0B8G=8< 70E2>@N20==O< ?@8 =002=>ABV ?@8=09<=V I5 >4=>3> D0:B>@0 @878:C 25=>7=>W B@><1>5
<1>;VW.
@>DV;0:B8:0 B@><1>CB2>@5==O 2 5:AB@0:>@?>@0;L=>=BC@V :@>2>>1V3C ?V4 G0A ?@>2545==O 35<>4V0;V7C (?@>F54C@0 2 A5@54=L>
B@820T ?@81;87=> 4 3>48=8 01> <5=H5).

@>B8?>:070==O.

V428I5=0 GCB;82VABL 4> 5=>:A0?0@8=C, 35?0@8=C 01> 9>3> ?>EV4=8E, C B><>;5:C;O@=8E 35?0@8=V2.
002=VABL 2 0=0<=57V BO6:>W 35?0@8=-V=4C:>20=>W B@><1>F8B>?5=VW (") B8?C , I> 1C;0 A?@8G8=5=0 =5D@0:FV9=8< 35?0@8=>< 01> =87L:>
<>;5:C;O@=8< 35?0@8=>< (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

5<>@03VG=V ?@>O28 01> AE8;L=VABL 4> :@>2>B5GV, ?>2O70=0 7 ?>@CH5==G 35<>AB07C (<>6;828< 28=OB:>< V7 FL>3> ?@>B8?>:070==O <>65 1CB8 48A520=5 2=CB@VH=L>AC48==5 73>@B0==O :@>2V, O:I> 2>=> =5 ?>2O70=5 7 35?0@8=>B5@0?VTN (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

@30=VG=V C@065==O, O:V <>6CBL A?@8G8=8B8 :@>2>B5GC.

:B82=0 ;V=VG=> 7=0GCI0 :@>2>B5G0.

:B82=0 28@07:0 H;C=:0 01> 420=04FOB8?0;>W :8H:8.

%2>@8<, O:V >B@8DV;0:B8:8, ?@>B8?>:070=0 -@53V>=0@=0 0=5AB57VO ?@8 ?;0=>28E EV@C@3VG=8E 2B@CG0==OE.

&59 ;V:0@AL:89 70AV17030;<< =5 @5:><5=4CTBLAO 70AB>A>2C20B8:

- E2>@8< 7 BO6:>N =8@>2>N =54>AB0B=VABN (;V@5=A :@50B8=V=C, @>7@0E>20=89 70 D>@N >:@>DB0, 30 <:/E2, 482. @>74V; «A>1;82>ABV 70AB>AC20==O»);

- C?@>4>26 ?5@H8E 24 3>48= ?VA;O 28=8:=5==O 2=CB@VH=L<>7:>2>3> :@>2>28;82C.

@V< B>3>, ?@>DV;0:B8G=V 4>78 FL>3> ?@5?0@0BC 7030;<< =5 @5:><5=4CTBLAO ?@87=0G0B8 >A>10< ;VB=L>3> 2V:C (2V:< 2V4 65 @>:V2) C :> <1V=0FVW 7 =0ABC?>8<8 70A>10<8 (482. @>74V; «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»):

1. F5B8;A0;VF8;>20 :8A;>B0 C 7=51>;N20;L=8E, 60@>7=86C20;L=8E B0 ?@>B870?0;L=8E 4>70E.

2. 5AB5@>W4=V ?@>B870?0;L=V ?@5?0@0B8 () (A8AB5<=5 70AB>AC20==O).

3. 5:AB@0= 40 (?0@5=B5@0;L=5 70AB>AC20==O).

70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9.

52=V ;V:0@AL:V 70A>18 01> B5@0?52B8G=V ;:0A8<>6CBL A?@8OB8 @>728B:C 3V?5@:0;5;V :0;VN, :0;V9715@V30NGV 4VC@5B8:8, V=3V1VB>@8 ?5@5B2>@N20;L=>3> 5=78@8 0=3V>B5=78=C , =5AB5@>W4=V ?@>B870?0;L=V ?@5?0@0B8, 35?0@8=8 (=87L:><;5:C;O@=89 01> =5D@0:FV9=89 35?0@8=), F8:>A?>@8= B0 B0:@>;V >728B>: 3V?5@:0;5

878: WW 28=8:=5==O 7@>AB0T, O:I> 28I52:070=V ;V:0@AL:V 70A>18 70AB>A>2C20B8 >4=>G0A=>.

0FVT=B8 ;VB=L>3> 2V:C (2V4 65 @>:V2).

51060=V :><1V=0FVW: 7 0F5B8;A0;VF8;>2>N :8A;>B>N C 7=51>;N20;L=8E, 60@>7=86C20;L=8E B0 ?@>B870?0;L=8E 4>70E (V 70 0=0;>3VTN V=HV A0;VF8;0B8). 1V;LHCTBLAO @878: :@>2>B5GV (?@83=VG5==O DC=:FVW B@<1>F8BV2 ?V4 4VTN A0;VF8;0BV2 B0 C@065==O A;87>2>W >1>;>=:8 H;C=:>2>-.8H:>2>3> B@0:BC).

!;V4 70AB>A>2C20B8 60@>7=86C20;L=V 7=51>;N20;L=V 70A>18, I> =5 =0;560BL 4> A0;VF8;0BV2 (=0?@8:;04, ?0@0F5B0<>);

=5AB5@>W4=8<8 ?@>B870?0;L=8<8 ?@5?0@0B0<8, 2:;NG0NG8 :5B>@>;0: (A8AB5<=5 70AB>AC20==O). 1V;LHCTBLAO @878: :@>2>B5GV (?@83=VG5==O DC=:FVW B@<1>F8BV2 ?V4 4VTN B0 C@065==O A;87>2>W >1>;>=:8 H;C=:>2>-.8H:>2>3> B@0:BC). /:I> =5<>6;82> C=8:=CB8 >4=>G0A=>3> 70AB>AC20==O, A;V4 ?@>2>48B8 @5B5;L=5 ;;V=VG=5 A?>AB5@565==O.

45:AB@0=>< 40 (?0@5=B5@0;L=5 70AB>AC20==O). V428I5=89 @878: @>728B:C :@>2>B5GV (?@83=VG5==O 45:AB@0=>< 40 DC=:FVW B@<1>F8BV2).

><1V=0FVW, I> ?>B@51CNBL 26820==O 70?>1V6=8E 70E>4V2.

?5@>@0;L=8<8 0=B8:>03C;O=B0<8. >A8;5==O 0=B8:>03C;O=B=>3> 5D5:BC. @8 70@0;L=8< 0=B8:>03C;O=B<> A;V4 ?>A8;8B8 ;;V=VG=89 =03;04.

><1V=0FVW, O:V A;V4 2@0E>2C20B8

V=3V1VB>@0<8 03@530FVW B@><1>F8BV2 (:@V< 0F5B8;A0;VF8;>2>W :8A;>B8 C 7=51>;N20;L=8E, 60@>7=86C20;L=8E B0 ?@>B870?0;L=8E 4>70E;): 01A8:A8<01, 0F5B8;A0;VF8;>20 :8A;>B0 2 0=B803@530=B=8E 4>70E ?@8 :0@4V>;>3VG=8E B0 =52@>;>3VG=8E ?>:070==OE, 15@0?@>AB, ;>?V4>3@5;L, 5?B8DV10B84, V;>?@>AB, B8:;>?V48=, B8@>DV10=.

1V;LHCTBLAO @878: :@>2>B5GV.

0FVT=B8 2V:<< 4> 65 @>:V2.

><1V=0FVW, O:V A;V4 2@0E>2C20B8 □><1V=>20=5 70AB>AC20==O ?@5?0@0BV2, O:V 2?;820NBL =0 35<>AB07, <>65 71V;LH8B8 @878: 28=8:=5==O :@>2>B5GV. ">2V4 2V:C ?0FVT=BV2, A;V4 2@0E>2C20B8 (0 >B65, ?@>2>48B8 B@820;5 ;:V=VG=5 A?>AB5@565==O B0, <>6;82>, ;01>@0B>@=5 >1AB565==O) 5D5:B8, I> 28=8:0NBL ?@8 >4=>G0A=>AC20==V C ?@>DV;0:B8G=8E 4>70E V7 B0:8<8 ;V:0@AL:8<8 70A>10<8: ?5@>@0;L=V 0=B8:>03C;O=B8, V=3V1VB>@8 03@530FVW B@><1>F8BV2 (01A8:A8<01, , 0F5B8;A0;VF8;>20 :8A;>B0 C 1C4L-O:8E 4>70E, ;;>?V4>3@5;L, A8AB5<=V 3;N:>:>@B8:>AB5@>W48, 5?B8DV10B84, V;>?@>AB, B8:;>?V48=, B8@>DV10=) B0 B@><1>;VB8G=V ?@5?0@0B8.

A>1;82>ABV 70AB>AC20==O.

@5?0@0B =5 4>72>;OTBLAO 22>48B8 2=CB@VH=L><□07>2>.

87L:><>;5:C;O@=V 35?0@8=8 =5 T 270T<>70B@V1=> ?@84V;OB8 C203C B0 4>B@8=:@5B=8E A?>A>1V2 70AB>AC20==O, @5:><5=4>20=8E 4;O :>6=>3> 7 ?@5?0@0BV2 =87L:><>;5:C;O@=8E 35?0@8=V2.

0?>1V6=V 70E>48 ?@8 70AB>AC20==V.

□@>2>B5G0. /: V ?@8 70AB>AC20==V CAVE V=H8E 0=B8:>03C;O=V2, <>6;825 28=8:=5==O :@>2>B5GV (482. @>74V; «>1VG=V @50:FVW»). @8 @>728B:C :@>2>B5GV A;V4 287=0G8B8 WW ?@8G8=C B0 ?@87=0G8B8 2V4?>2V4=5 ;V:C20==O.

\$C=:FVO =8@>.: 5@H =V6 ?>G0B8 ;V:C20==O =87L:><>;5:C;O@=8< 35?0@8=><, A;V4 >FV=8B8 =8@:>2C DC=:FVN, 7>:@5<0 C E2>@8E 2V:< 2V4 75 @>:V2, H;OE>< 287=0G5==O ;:V@5=AC :@50B8=V=C 70 D>@N >:@>DB0, 28:>@8AB>2CNG8 40=V >AB0==L>3> 28

;O E2>@8E G>;>2VG>W AB0BV: ;:V@5=A :@50B8=V=C (140-2V:) E<0A0 BV;0/(0,814 E :@50B8=V= 2 A8@>20BFV :@>2V), 45 2V: 28@065=> 2 @>:0E, <0A0 2 :3, 0 :@50B8=V= 2 A8@>20BFV :@>2V 2 <>;L/;

;O 6V=>: FN D>@83C20B8 H;OE>< <=>65==O @57C;LB0BC =0 0,85.

/:I> A8@>20B:>289 :@50B8=V= 28@065=> 2 <3/<;, ?>:07=8: A;V4 ?><=>68B8 =0 :>5DVFVT=B 8,8.

0AB>AC20==O ;V:C20;L=8E 4>7 E2>@8< 7 4V03=>AB>20=>N BO6:>N =8@:>2>N =54>AB0B=VABN (;V@5=A :@50B8=V=C 30<;E2) ?@>B8?>:070=> (482. @>74V; «@>B8?>:070==O»).

@83=VG5==O A5:@5FVW 0;L4>AB5@>=C. 5?0@8= <>65 ?@83=VGC20B8 A5:@5FVN 0;L4>AB5@>=C =04=8@:>28<8 70;>70<8, >A>1;82> C ?0FVT=BV2 7 FC:@>28< 4V015B><, E@>=VG=>N =8@:>2>N =54>AB0B=VABN, C65 VA=CNG8< <5B01>;VG=8< 0F84>7><, ?V428I5=8< @V2=5< :0;VN C ?;072V, 0 B0:>6 C ?0FVT=BV2, O:V ?@89<0NBL ?@5?0@0B8 :0;VN. 878: 3V?5@:0;VT1>@>B=82V =5>1EV4=> 28 ?>G0B:C ;V:C20==O 35?0@8=>< B0 @53C;O@=> :>=B@>;N20B8 C ?>40;LH>A>1;82> O:I> ;V:C20==O B@820T ?>=04 7 4=V2.

01>@0B>@=V ?>:07=8:8.

>=B@>;L @V2=O B@><1>F8BV2 V @878: 35?0@8=V=4C:>20=>W B@><1>F8B>?5=VW (=0?@8:;04, " B8?C). <>6CBL V=4C:C20B8 @>728B>: " II B8?C A5@9>7=>W V>?>A5@54:>20=>W B@><1>F8B>?5=VW, O:0 <>65 A?@8G8=8B8 0@B5@V0;L=V 01> 25=>7=V B@><1>5<1>;VG=V ?>4VW, I>

<>6CBL 1CB8 =5157?5G=8<8 4;O 68BBO 01> ?>3V@HC20B8 DC=:FV>=0;L=89 ?@>3=>7 4;O ?0FVT=B0 (482. @>74V; «>1VG=V @50:FVW»). ;O A2>TG0A=>3> 28O2;5==O " 70 ?0FVT=B0<8 =5>1EV4=> 74V9A=N20B8 :>=B@>;L C B0:>@04:C:

0FVT=B8, I> ?5@5=5A;8 >?5@0B82=5 2B@CG0==O 01> =5I>402=> >B@8<0;8 B@02BO3>< 3 2V4 B>3>, ?@87=0G0TBLAO ?@5?0@0B 4;O

;V:C20;L=>W 01> ?@>DV;0:B8G=>W B5@0?VW, 2 CAVE ?0FVT=BV2 =5>1EV4=5 A8AB50B8G=5 28:>=0==O ;01>@0B>@=8E 4>A;V465=L, >A:V;L:8 G0AB>B0 " AB0=>28BL > 0,1 % 01> =02VBL > 1 % C EV@C@3VW B0 B@02<0B>;>3VW. &V 4>A;V465==O <0NBL 2;;NG0B8 287=0G5==O 2<1>F8BV2:

- ?5@54 ?@87=0G5==O< 01> =5 ?V7=VH5 =V6 G5@57 24 3>48=8 ?VA;O ?>G0B:C B5@0?VW ?@5?0@0B<;
- C ?>40;LH>BO3<< >4=>3> 4 <0:A8<0;L=>3> @878:C);
- C ?>40;LH> ;V:C20==O ?@>4>26CTBLAO, >48= @07 =0 B8645=L 4> 2V4
0FVT=B 7 V=H8<8 AB0=0<8, 2V4 2V4 B>3>, ?@87=0G0TBLAO ?@5?0@0B 4;O ;V:C20;L=>W 01> ?@>DV;0:B8G=>W B5@0?VW, =5>1EV4=5 A8AB5
<0B8G=5 28:>=0==O ;01>@0B>@=8E 4>A;V465=L 73V4=> V7 B8<8 6 ?@8=F8?0<8, I> 70AB>A>2CNBLAO 2 EV@C@3VW V B@02<0B>;>3VW (482.
28I5), C ?0FVT=BV2:
- O:V @0=VH5 >B@8=>20=89 35?0@8= (\$) 01> 2 >AB0==V 6 2CNG8, I> G0AB>B0 " AB0=>28BL > 0,1% 01> =02VBL > 1 %;
- O:V <0NBL 7=0GCIV AC?CB=V 70E2>@N20==O, 2@0E>2CNG8 ?>B5=V9=C BO6:VABL " C B0:8E ?0FVT=BV2.
V=H8E 28?04:0E, 15@CG8 4> C2038 1V;LH =87L:C G0AB>BC @>728B:C " (< 0,1 %), :=B@>;L 2<1>F8BV2 <>65 1CB8 >1<565=89 B0:8<8 70E>40<8:
- :=B@>;L 2<1>F8BV2 =0 ?>G0B:C ;V:C20==O 01> =5 ?V7=VH5 =V6 G5@57 24 3>48=8 ?VA;O ?>G0B:C ;V:C20==O;
- :=B@>;L 2<1>F8BV2 70 =002=>ABV ;;V=VG=>W A8<0B8:8, I> <>65 2:07C20B8 =0 " (1C4L-O:89 =>289 5?V7>4 0@B5@V0;L=>W B0/01> 25=>7=>W
B@><1>5<1>;VW, 1C4L-O:5 1>;VA=5 C@065==O H:V@8 2 <>6;82VABL 28=8:=5==O B0:8E A8?>B@51C ?>2V4<<;5==O ?@> =8E ;V:0@N.
!;V4 70?V4>7@8B8 28=8:=5==O ", O:I> :V;L:VABL B@><1>F8BV2 =86G5 150 000/<<3 B0/01> O:I> <0 ?>A;V4>2=8<8 287=0G5==O<8
A?>AB5@V30TBLAO 7=865==O :V;L:>ABV B@><1>F8BV2 =0 30-50 %. 030;>< " @>72820TBLAO G5@57 5-21 45=L ?VA;O ?>G0B:C ;V:C20==O
35?0@8=>< (1V;LHVABL 28?04:V2 28=8:0T G5@57 10 4=V2).
4=0: C E2>@8E 7 35?0@8=V=4C:>20=>N B@><1>F8B>?5=VTN 2 0=0<=57V F5 CA:;04=5==O <>65 28=8:=CB8 =01030B> @0=VH5, ?@> >:@52V4>
<;O;>AO G5@57 21 45=L. B65, A;V4 A8AB5<0B8G=> 28O2;OB8 E2>@8E 7 B0:8< 0=0<=57<<, ?@>2>4OG8 45B0;L=V A?V215AV48 7 E2>@8-8 ?5@54
?>G0B:>< ;V:C20==O.
@V< B>3>, @878: @5F8482C ?@8 2V4=>2;5==V ;V:C20==O 35?0@8=>< <>65 715@V30B8AO ?@>BO3<< 45;V;L:>E @>:V2 01> =02VBL ?@>BO3<<
=5>1<565=>3> ?5@V>4C G0AC (482. @>74V; «@>B8?>:070==O»).

2AVE 28?04:0E " T:@8B8G=8< AB0=V ?>B@51CT :=AC;LB0FVW A?5FV0;VAB0.
C4L-O:5 7=0G=5 7=865==O :V;L:>ABV B@><1>F8BV2 (30-50 % 2V4=>A=> ?>G0B:>2>3> @V2=O) T ?>?5@546C20;L=8< 7=0:>< =02VBL 4> B>3>, O:
F59 ?>:07=8: 4>AO3=5 :@8B8G=>3> @V2=O. # 2AVE 28?04:0E 7=865==O :V;L:>ABV B@><1>F8BV2 A;V4 268B8 =0ABC?=8E 70E>4V2:
1) B5@2> ?@>25AB8 :=B@>;L :V;L:>ABV B@><1>F8BV2;
2) ?@8 ?V4B25@465==V 01> =02VBL ?@>3@5AC20==V B@><1>F8B>?5=VW ?@8 2V4ACB=>ABV V=H>W >G5284=>W ?@8G8=8 FL>3> O28I0
=5>1EV4=> 2V4<.
@07>: :@>2V 7018@0B8 C ?@>1V@:C 7 F8B@0B<< 4;O ?@>2545==O B5ABV2 =0 03@530FVN B@><1>F8BV2 in vitro B0 V;>3VG=8E B5ABV2. 4=0:
?@8 B0:8E AB0=0E B5@2V 70E>48 A;V4 ?@89<0B8 =5 =0 ?V4AB02V @57C;LB0BV2 B5ABV2 =0 03@530FVN B@><1>F8BV2 in vitro 01> V
>3VG=>3> 0=0;V7C, >A:V;L:8 B0:V 0=0;V78 A;V4 28:=C20B8 C 728G09=>@O4:C ;8H5 2 45O:8E A?5FV0;V7>20=8E ;01>@0B>@VOE, 0 @57C;LB0B8
C :@0I>B>2V ;8H5 G5@57 45;V;L:0 3>48=. A5 6 FV 0=0;V78 T =5>1EV4=8<8 4;O 4V03=>AB8:8 CA:;04=5=L, >A:V;L:8 ?@8 ?@>4>265==V ;V:C20==O
35?0@8=>< @878: @>728B:C B@><1>7C 4C65 28A>:89;
3) ?@>DV;0:B8:0 01> ;V:C20==O B@><1>B8G=8E CA:;04=5=L, I> ?>2O70=V 7 ".
/I> VA=CT =5>1EV4=VABL ?@>4>26C20B8 0=B8:>03C;O=B=C B5@0?VN, 35?0@8= A;V4 70<1>B8G=8< 70A>1<< V=H>W 3@C?8, =0?@8:;04,
40=0?0@>W4<< =0B@VN 01> 3V@C48=><<, O:V ?@87=0G0NBLAO 2 ;V:C20;L=8E 01> ?@>DV;0:B8G=8E 4>70E C :=6=>@5<<.
0@0;L=8< 0=B8:>03C;O=B><< <>6;820 BV;L:8 ?VA;O =>@<0;V70FVW :V;L:>ABV B@><1>F8BV2, >A:V;L:8 VA=CT 703@>70 @5F8482C B@><1>7C ?V4
2?;82<< ?5@>@0;L=8E 0=B8:>03C;O=BV2.
0@0;L=8<8 0=B8:>03C;O=B0<8. <5B>N <=>VB>@8=3C 5D5:BV2 ?5@>@0;L=8E 0=B8:>03C;O=BV2 A;V4 ?>A8;8B8 ;V=VG=89 =03;04 B0 ?V428I8B8
G0AB>BC ?@>2545==O ;01>@0B>@=8E 0=0;V7V2 (?@>B@><1V=>289 G0A, I> 28@065=89 O: 4=5 =>@<0;V7>20=5 A?V22V4=>H5==O (!)).

A;V;L:8 4;O @>728B:C <0:A8<0;L=>3> 5D5:BC ?5@>@0;L=>3> 0=B8:>03C;O=BC ?>B@V15= 45O:89 G0A, B> =5>1EV4=> ?@>4>26C20B8
35?0@8=>B5@0?VN C ?>ABV9=V9 4>7V ?@>BO3<< G0AC, 4>AB0B=L>3> 4;O 715@565==O ?>:07=8:0 ! C 1060=>3> B5@0?52B8G=>3> ?>:070==O
V=B5@20;V <0 ?>A;V4>2=> 28:>=0=8<8 0=0;V70<8.
>=VB>@8=3 0=B8-%0 0:B82=>ABV. A;V;L:8 1V;LHVABL ;:V=VG=8E 4>A;V465=L, O:V ?@>45>=AB@C20;8 5D5:B82=VABL , 1C;8 ?@>2545=V V7
70AB>AC20==O< 4>78, @>7@0E>20=>W, 28E>4OG8 7 <0A8 BV;0 E2>@>3>, 157 A?5FV0;L=>3> ;01>@0B>@=>3> :>=B@>;N, =5>1EV4=VABL
?@>2545==O ;01>@0B>@=8E 0=0;V7V2 4;O 287=0G5==O 5D5:B82=>ABV ;V:C20==O =5 2AB0=>2;5=0. 4=0: C ?52=8E ;:V=VG=8E A8BC0FVOE, O:V
G0AB> AC?@>2>46CNBLAO @878:< ?5@54>7C20==O, ;01>@0B>@=V 0=0;V78, 0 A0<5: <=>VB>@8=3 0=B8-%0 0:B82=>ABV <>65 1CB8 :>@8A=8<
4;O ?>?5@5465==O @878:C 28=8:=5==O :@>2>B5GV.
"0:V A8BC0FVW ?5@5206=> AB>ACNBLAO;V:C20;L=8E ?>:070=L 4> 70AB>AC20==O V ?>2O70=V 7 4>70<8, I> ?@87=0G0NBL E2>@8
- 7 ;53:>N B0 ?>N =8@:>2>N =54>AB0B=VABN (:;V@5=A :@50B8=V=C 30-60<;/E2 70 D>@N>:@>DB0). A;V;L:8 =0 2V43> =5D@0:FV9=>3> 35?0@8=C
282>48BLAO ?5@5206=> =8@:0<8, B> 1C4L-O:0 =8@:>20 =54>AB0B=VABL <>65 AB0B8 ?@8G8=>N 28=8:=5==O 2V4=>A=>3> ?5@54>7C20==O.
"06:0 =8@:>20 =54>AB0B=VABL T ?@>B8?>:070==O< 4> 70AB>AC20==O C ;V:C20;L=8E 4>70E (482. @>74V; «@>B8?>:070==O»);
- 7 =04728G09=> 25;8:>N 01> <0;>N <0A>N BV;0 (4C65 <0;0 <0A0 BV;0 01> =02VBL :0E5:AVO, >68@V==O);
- 7 :@>2>B5G5N =57OA>20=>W 5BV>;>3VW.
02?0:8, ?@>2545==O ;01>@0B>@=>3> <=>VB>@8=3C =5 @5:><5=4CTBLAO C 28?04:C 70AB>AC20==O ?@>DV;0:B8G=8E 4>7, O:I> ;V:C20==O
?@>2>48B8 2V4?>2V4=> 4> B5@0?52B8G=8E @5:><5=40FV9 (7>:@5<0, I>4> B@820;>ABV ;V:C20==O), 0 B0:>6 ?V4 G0A 35<>4V0;V7C.
;O 28O2;5==O <>6;82>W :C2B>@=>3> 22545==O @5:><5=4CTBLAO ?@8 =5>1EV4=>ABV 1@0B8 :@>2 =0 0=0;V7 =0 ?V:C 0:B82=>ABV (73V4=> 7
=0O2=8<8 40=8<8), B>1B> G5@57 4 3>48=8 ?VA;O B@5BL>W V=T:FVW ?@8 ?V4H:V@=>1C.
5>1EV4=VABL ?@>2545==O ?>2B>@=8E 0=0;V7V2 0=B8-%0 0:B82=>ABV 4;O 287=0G5==O @V2=O 35?0@8=C 2 :@>2V, =0?@8:;04, G5@57 :>6=V 2-3
4=V, 28@VHCTBLAO 2 V=482V4C0;L=>@04:C 70;56=> 2V4 @57C;LB0BV2 ?>?5@54=L>3> 0=0;V7C. "0:>6 <>65 1CB8 =5>1EV4=> A:>@53C20B8 4>78 .
87=0G5=0 0=B8-%0 0:B82=VABL 72V4 >:@5<>3> B0 >:@5<>3> @5687C20==O.
> 2V4><0: 28E>4OG8 7 =0O2=8E 40=8E, A5@54=V9 ?>:07=8: (± AB0=40@B=5 2V4E8;5==O), O:89 A?>AB5@V302AO G5@57 4 3>48=8 ?VA;O AL<>W
V=T:FVW 5=>:A0?0@8=C, I> 22>482AO C 4>7V 100 0=B8-%0 /:3/V=T:FVN 2 @078 =0 4>1C, AB0=>282 1,20±0,17 0=B8-%0 /<;
&59 A5@54=V9 ?>:07=8: A?>AB5@V302AO ?V4 G0A ;:V=VG=8E 4>A;V465=L, C O:8E :V;L:VA=5 287=0G5==O 0=B8-%0 0:B82=>ABV ?@>2>48;8 E@>
<>35==8< (0;VB8G=8<) <5B>4>
:B82>20=89 G0AB:>289 B@><1>?;0AB8=>289 G0A (""). 5O:V A?@8G8=ONBL ?>3> 5D5:BC =5 7OA>20=5, B> =5<0T =5>1EV4=>ABV
28:>@8AB>2C20B8 F59 B5AB 4;O <=>VB>@8=3C ;V:C20==O.
! ?V=0;L=0/5?V4C@0;L=0 0=5AB57VO C E2>@8E, O:V >B@8DV;0:B8G=5 ;V:C20==O ./: V C 28?04:C 7 V=H8<8 0=B8:>03C;O=B0<8, 1C;8
70@5TAB@>20=V ?>>48=>:V 28?04:8 A?V=0;L=8E 35<0B>< ?@8 70AB>AC20==V ?V4 G0A ?@>2545==O A?V=0;L=>W/5?V4C@0;L=>W 0=5AB57VW,
I> A?@8G8=O;8 B@820;89 01> ?>ABV9=89 ?0@0;VG.
878: @>728B:C A?V=0;L=>W 35<0B><8 28I89 C 28?04:C 5?V4C@0;L=>W 0=5AB57VW, O:0 ?@>2>48BLAO V7 70AB>AC20==O< :0B5B5@0, =V6 C
28?04:C A?V=0;L=>W 0=5AB57VW.
878: 28=8:=5==O B0:8E ?>>48=>:8E 28?04:V2 <>65 7@>AB0B8 ?@8 B@820;>@8AB0==V 5?V4C@0;L=8E :0B5B5@V2 C ?VA;O>?5@0FV9=89 ?5@V>4.
28?04:C :>;8 ;V:0@ ?@89<0T @VH5==O ?@> ?@87=0G5==O 0=B8:>03C;O=BV2 =0 B;V ?@>2545==O 5?V4C@0;L=>W/A?V=0;L=>W 0=5AB57VW,
=5>1EV4=0 =04728G09=0 ?8;L=VABL B0 ?>ABV9=89 :>=B@>;L 4;O 28O2;5==O 1C4L-O:8E A8>3VG=8E ?>@CH5=L, B0:8E O: 1V;L ?> A5@548==V9
;V=VW A?8=8, ?>@CH5==O GCB;828E B0 @CE>28E DC=:FV9 (>=V A;01:VABL =86=VE :V=FV2>:), 48ADC=:FVO :8H5G=8:C B0/01> A5G>2>3>
0FVT=BV2 =5>1EV4=> ?>?5@5@548B8 ?@> =5>1EV4=VABL =5309=> ?>2V4<;OB8 A2>3> ;V:0@O ?@> 28=8:=5==O C =8E 1C4L-O:8E 7
28I5=0720=8E A8 ?V4>7@NTBLAO A?V=0;L=0 35<0B><0, =5>1EV4=> @>7?>G0B8 =52V4:;04=V 4V03=>AB8G=V B0 ;V:C20;L=V 70E>48, 2 B>3>

<>7:C.

!/:I> C ?5@54>?5@0FV9=>4V ?>B@V1=5 ;V:C20==O (E2>@8<, O:V B@820;89 G0A 7=0E>4OBLAO =0 ?>ABV;L=>:@8ABL 2V4 W/@53V=>0;L=>W A?V=0;L=>W 0=5AB57VW @5B5;L=> 72065=0, B> E2>@8<, O:V >B@8<0;8 V=T:FVN C ?5@54>?5@0FV9=>4V, <>6=0 ?@>2>48B8 0=5AB57VN 70 C <>28, I>

5:>5=4CTBLAO ?@>2>48B8 @5B5;L=5 =52@>;>3VG=5 A?>AB5@565==O G5@57 =5157?5:C 28=8:=5==O A?V=0;L=>W 35<0B><8.

0965 2 CAVE E2>@8E G5@57 6-8 3>48= ?VA;O 0=5AB57VW 01> ?VA;O 2840;5==O :0B5B5@0<>6=0 @>7?>G8=0B8 ?@>DV;0:B8G=5 ;V:C20==O ?@8 ?@>2545==V =52@>;>3VG=>3> A?>AB5@565==O.

!;V4 4>B@8A>1;82>W >15@56=>ABV ?@8 70AB>AC20==V ?@5?0@0BC >4=>G0A=> 7 V=H8<8 ;V:0@AL:8<8 70A>10<8, O:V 2?;820NBL =0 35<>AB07 (>A>1;82> =5AB5@>W4=8<8 ?@>B870?0;L=8<8 70A>10<8, 0A?V@8=><).

/B0=8, I> AC?@>2>46CNBLAO >A>I;828< @878:> >=B@>;L 70 E>4<< ;V:C20==O A;V4 ?>A8;8B8 C =0ABC?=8E 28?04:0E:

- ?>@CH5==O DC=:FVW ?5GV=:8;

- =0O2=VABL 2 0=0<=57V 28@07:8 30AB@>4C>45=0;L=>W 7>=8 01> V=H8E >@30=VG=8E C@065=L, O:V <>6CBL A?@8G8=8B8 :@>2>B5GC;

- AC48==5 E>@V>@5B8=0;L=5 70E2>@N20==O;

- ?VA;O>?5@0FV9=89 ?5@V>4 ?VA;O EV@C@3VG=>3> 2B@CG0==O =0 3>;>2=>A?8==>

- ;N<10;L=0 ?C=:FVO: A;V4 2@0E>2C20B8 @878: V=B@0A?V=0;L=>W :@>2>B5GV V, ?><>6;82>ABV, 2V4:;040B8 WW ?@>2545==O =0 O:=094>2H89 G0A;

- >4=>G0A=5 70AB>AC20==O 7 ;V:0@AL:8<8 70A>10<8, I> 2?;820NBL =0 35<>AB07 (482. @>74V; «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»).

%>G0 :>=F5=B@0FVW @V7=8E =87L:><>;5:C;O@=8E 35?0@8=V2 287=0G0NBLAO 2 4=8E >48=8FOE () 0=B8-%0 0:B82=>ABV, WE 5D5:B82=VABL 287=0G0TBLAO =5 ;8H5 WE 0=B8-%0 0:B82=VABN. 5157?5G=> 7048= @568< 4>7C20==O V=H8<, >A:V;L:8 :>65= @568< 1C;> >1'@C=B>20=> A?5FV0;L=8<8 ;V=VG=8<8 4>A;V465==O<8. B65, ?@8 70AB>AC20==V :>6=>3> ?@5?0@0BC A;V4 4>B@8A>1;82>W >15@56=>ABV B0 28:>=C20B8 A?5FV0;L=V V=AB@C:FVW 7 9>3> 70AB>AC20==O.

0AB5@565==O.

878: :@>2>B5GV. 5>1EV4=> 4>B@8<5=4>20=8E @5687C20==O (4>7C20==O B0 B@820;VABL ;V:C20==O). 528:>=0==O F8E @5:>5=40FV9 <>65 A?@8G8=8B8 @>728B>: :@>2>B5GV, 7>:@5<0 C E2>@8E, O:V =0;560BL 4> 3@C?8 ?V428I5=>3> @878:C (E2>@V ;VB=L>3> 2V:C, 7 ?>@CH5==O< DC=:FVW =8@>:).

8?04:8 BO6:8E :@>2>B5G A?>AB5@V30;8AO C B0:8E A8BC0FVOE:

- C E2>@8E ;VB=L>3> 2V:C, 7>:@5<0 G5@57 7=865==O DC=:FVW =8@>;, I> 28=8:0T 7 2V:>;

- C E2>@8E 7 ?>@CH5==O< DC=:FVW =8@>;;

- ?@8 <0AV BV;0<5=H5 40 :3;

- ?@8 ;V:C20==V, B@820;VABL O:>3> ?5@528ICT @5:>5=4>20=C A5@54=N B@820;VABL 2 10 4=V2;

- ?@8 =528:>=0==V B5@0?52B8G=8E @5:>5=40FV9 (7>:@5<0 B8E, I> AB>ACNBLAO B@820;>ABV ;V:C20==O B0 :>@5:FVW 4>78 2V4?>2V4=> 4> <0A8 BV;0 ?V4 G0A ;V:C20==O);

- ?@8 >4=>G0A=>AC20==V 7 ?@5?0@0B0<8, O:V ?V428ICNBL @878: 28=8:=5==O :@>2>B5GV (482. @>74V; «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»).

= T:FVW 5=>:A0?0@8=C, O: V 1C4L-O:>3> V=H>3> 0=B8:>03C;O=BC, =5>1EV4=> 70AB>A>2C20B8 7 >15@56=VABN ?@8 AB0=0E, 4;O O:8E
2;0AB820 ?V428I5=0 V<>2V@=VABL 28=8:=5==O :@>2>B5G, B0:8E O: ?>@CH5==O 35<>AB07C, =0O2=VABL ?5?B8G=>W 28@07:8 2 0=0<=57V,
=5I>402=> ?5@5=5A5=89 VH5=B@>;L>20=0 0@B5@V0;L=0 3V?5@B5=7VO, 4V015B8G=0 @5B8=>?0BVO, =5I>402=> ?5@5=5A5=5
=59@>EV@C@3VG=5 01> >DB0;L<>;>3VG=5 EV@C@3VG=5 2B@CG0==O.
1C4L-O:>@V ;VB=L>3> 2V:C B0/01> E2>@V 7 ?>@CH5==O< DC=:FVW =8@>;, 0 B0:>6 E2>@V, ;V:C20==O O:8E B@820T 1V;LH5 10 4=V2,
?>B@51CNBL >A>1;82>3> <548G=>3> =03;O4C.
?52=8E 28?04:0E :V;L:VA=5 287=0G5==O 0=B8-%0 0:B82=>ABV<>65 1CB8 :>@8A=8< 4;O 28O2;5==O :C
878: 35?0@8=-V=4C:>20=>W B@><1>F8B>?5=VW ("). @8 @>728B:C =0ABC?=8E B@><1>B8G=8E CA:;04=5=L C E2>@>3>, O:89 >B@8
?@>DV;0:B8G=8E 4>70E):
- 703>AB@5==O B@><1>7C, ;V:C20==O O:>3> ?@>2>48BLAO;
- D;51VB;
- B@><1>5<1>;VO ;535=52>W 0@B5@VW;
- 3>AB@0 VH5;;
- 01> =02VBL V=D0@:B :0@40 01> VH52> 287=0G0B8 :V;L:VABL B@><1>F8BV2 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).
@>F54C@8 @520A:C;O@870FVW :>@>=0@=8E 0@B5@V9. ;O >1<565==O @878:C @>728B:C :@>2>B5GV C ?0FVT=BV2, O:8< ?@>2>48BLAO
0=3V>?;0AB8:0 :>@>=0@=8E 0@B5@V9 7 <5B>N ;V:C20==O =5AB01V;L=>W AB5=>:0@4VW, V=D0@:BC:0@40 157 7C1FO Q 01> 3>AB@>3>
V=D0@:BC :0@40 7 ?V49><> A53<5=B0 ST A;V4 B>G=> 4>B@8<5=4>20=8E ?@>1EV4=> 2840;8B8 G5@57 6 3>48= ?VA;O >AB0==L>3>
?V4H:V@=>3>/2=CB@VH=L>25==>3> 22545==O 5=>:A0?0@8=C. @8 ?@>4>265==V ;V:C20==O V7 70AB>AC20==O< 5=>:A0?0@8=C =0ABC?=C
V=T:FVN A;V4 @>18B8 =5 @0=VH5 =V6 G5@57 6-8 3>48= ?VA;O 2840;5==O ?@>2V4=8:0. 5>1EV4=> A?>AB5@V30B8 70
0O2=VABL <5E0=VG=8E ;:0?0=V2 A5@FO 7V HBCG=8E <0B5@V0;V2. 0AB>AC20==O 5=>:A0?0@8=C 7 <5B>N ?>?5@5465==O B@><1>5<1>;VG=8E
CA:;04=5=L C ?0FVT=BV2 7V HBCG=8<8 <5E0=VG=8<8 ;:0?0=0<8 A5@FO C A?5FV0;L=8E 4>A;V465==OE =5 282G0;>AO.
4=0: 1C;> 70@5TAB@>20=> 45;V;L:0 ?>>48=>:8E 28?04:V2 B@><1>7C C ?0FVT=BV2 7V HBCG=8<8 <5E0=VG=8<8 ;:0?0=0<8 A5@FO, O:V >B@8
:A0?0@8= 4;O ?>?5@5465==O B@><1>5<1>;VG=8E CA:;04=5=L.
03VB=V 6V=:8. V4 G0A ;:V=VG=>3> 4>A;V465==O A5@54 203VB=8E 6V=>: 7V HBCG=8<8 <5E0=VG=8<8 ;:0?0=0<8 A5@FO, O:V >B@8:A0?0@8=C 2
@078 =0 4>1C 7 <5B>N 7<5=H5==O @878:C B@><1>5<1>;VG=8E CA:;04=5=L, C 2 7 8 6V=>: @>728=C2AO B@><1>7, O:89 ?@872V2 4> B0=048 ;:0?0=0
B0 ;5B0;L=>3> =0A;V4:C <0B5@V B0 ?;>40. @V< FL>3>, ?>>48=>:V 28?04:8 B@><1>7C C 203VB=8E 6V=>: 7V HBCG=8<8 <5E0=VG=8<8 ;:0?0=0<8
A5@FO, O:V >B@8:A0?0@8= 4;O 7<5=H5==O @878:C B@><1>5<1>;VG=8E CA:;04=5=L, 1C;8 70@5TAB@>20=V V ?V4 G0A ?@>2545==O ?>AB
<0@:5B8=3>2>3> A?>AB5@565==O 70 ?@5?0@0B<>1>5<1>;VG=8E CA:;04=5=L C F8E ?0FVT=B>: <>65 1CB8 28I8
548:0<5=B>7=0 ?@>DV;0:B8:0.
28?04:C 3>AB@>3> 5?V7>4C V=D5:FV9=>3> 01> @52<0B8G=>3> 70E2>@N20==O ?@>DV;0:B8G=0 B5@0?VO 28?@0240=0 ;8H5 70 C<>28
=0O2=>ABV B0:>6 E>G0 1 >4=>3> 7 =0ABC?=8E D0:B>@V2 @878:C @>728B:C 25=>7=>W B@><1>5<1>;VW:
- 2V: AB0@H5 75 @>:V2,
- >=:;>;>3VG=5 70E2>@N20==O,
- 25=>7=0 B@><1>5<1>;VO 2 0=0<=57V,
- >68@V==O,
- B5@0?VO 7 70AB>AC20==O< 3>@<>=V2,
- A5@F520 =54>AB0B=VABL,
- E@>=VG=0 48E0;L=0 =54>AB0B=VABL.

>A2V4 70AB>AC20==O FL>3> ?@5?0@0BC 7 <5B>N <548:0<5=B>7=>W ?@>DV;0:B8:8 C ?0FVT=BV2 2V:< AB0@H5 80 @>:V2 7 <0A>N BV;0 <5=H5 40 :3 =0@07V 4C65 >1<565=89.

@>2>B5GV C ;N459 ;VB=L>3> 2V:C # ;N459 ;VB=L>3> 2V:C =5 ?> ?V428I5=>W B5=45=FVW 4> :@>2>B5G C <560E ?@>DV;0:B8G=>3> 4V0?07>=C 4>7. 0FVT=B8 ;VB=L>3> 2V:C (>A>1;82> ?0FVT=B8 2V:< 2V4 80 @>:V2) <0NBL ?V428I5=89 @878: CA.;04=5=L, ?>2O70=8E 7 :@>2>B5G0<8, C B5@0?52B8G=>=V 4>7. @8 ;V:C20==V 3>AB@>3> V=D0@:BC :0@40 7 5;520FVTN A53<5=B0 ST (STEMI) 71V;LH5==O :V;L:>ABV :@>2>B5G 2V47=0G0;>AO C ?0FVT=BV2 2V:< 2V4 65 4> 75 @>:V2, 2:07CNG8 =0 B5, I> FV ?0FVT=B8 <0NBL ?V428I5=89 @878: :@>2>B5G. 5:<5=4CTBLAO @5B5;L=89 ;V=VG=89 <=>VB>@8=3 (B0:>6 482. @>74V;8 <!>AV1 70AB>AC20==O B0 4>78» B0 «\$0@<0:>:V=5B8:0»).

>@CH5==O DC=:FVW =8@>.: 0FVT=B8 7 ?>@CH5==O< DC=:FVW =8@>: ?V4?040NBL ?V4 71V;LH5=89 2?;82 5=>:A0?0@8=C, I> ?V428ICT @878: :@>2>B5G. A:V;L:8 2?;82 5=>:A0?0@8=C ACBBT2> ?V428ICTBLAO C ?0FVT=BV2 7 BO6:>N =8@>:2>N =54>AB0B=VABN (;V@5=A :@50B8=V=C < 30 <:/E2), B> @5:<5=4CTBLAO :>@5:FVO 4>78 2 B5@0?52B8G=>DV;0:B8G=>=V 4>7. %>G0 =5<0T @5:<5=40FV9 AB>A>2=> :>@5:FVW 4>78 4;O ?0FVT=BV2 7 =8@>:2>N =54>AB0B=VABN A5@54=L>3> (;V@5=A :@50B8=V=C 30-50<:/E2) B0 ;53:>3> ABC?5=O (;V@5=A :@50B8=V=C 50-80<:/E2), @5:<5=4CTBLAO 74V9A=N20B8 @5B5;L=89 ;V=VG=89 <=>VB>@8=3 (482. @>74V;8 <!>AV1 70AB>AC20==O B0 4>78» B0 «\$0@ <0:>:V=5B8:0»). 0=V I>4> ;V:C20==O 3>AB@>3> V=D0@:BC :0@40 7 5;520FVTN A53<5=B0 ST (STEMI) C ?0FVT=BV2 7 @V2=O<8 :@50B8=V=C 28I5 220 B0 175

87L:0 <0A0 BV;0. # 6V=>: 7 =87L:>N <0A>N BV;0 (<45 :3) B0 G>;>2V:V2 7 =87L:>N <0A>N BV;0 (<57 :3) 2V47=0G02AO 71V;LH5=89 2?;82 5=>:A0?0@8=C 2 ?@>DV;0:B8G=>=V 4>7 (=5 :>@83C20;8AO 2V4?>2V4=> 4> <0A8 BV;0), I> G0ABVH5 <>65 ?@872>48B8 4> 28=8:=5==O :@>2>B5G. "0:8< G8=><, @5:<5=4CTBLAO 74V9A=N20B8 @5B5;L=89 ;V=VG=89 <=>VB>@8=3 AB0=C F8E ?0FVT=BV2 (482. @>74V; «\$0@<0:>:V=5B8:0»). >=VB>@8=3. FV=:0 @878:C B0 ;V=VG=89 <=>VB>@8=3 =5>1EV4=V 4;O ?@>3=>7C20==O @878:C ?>B5=FV9=8E :@>2>B5G. 0728G09 =5<0T =5>1EV4=>ABV C 728G09=> <=>VB>@8=3 0:B82=>ABV 0=B8-%0 <>65 <>65 ?>B@51C20B8AO 4;O B8E ?0FVT=BV2, O:V >B@86 <0NBL ?V428I5=89 @878: :@>2>B5G (=0?@8.;04 4;O ?0FVT=BV2 7 =8@>:2>N =54>AB0B=VABN, ?0FVT=BV2 ;VB=L>3> 2V:C B0 ?0FVT=BV2 7<56>28<8 7=0G5==O<8 <0A8 BV;0) 01> 0:B82=V :@>2>B5GV.

01>@0B>@=V 0=0;V78. # 4>70E, I> 70AB>A>2CNBL 4;O ?@>DV;0:B8:8 25=>7=>W B@<1>5<1>;VW, 5=>:A0?0@8= =0B@VN =5 2?;8202 ACBBT2> =V =0 G0A :@>2>B5GV B0 7030;L=V 0=0;V78 73>@B0==O :@>2V, =V =0 03@530FVN B@<1>F8BV2 01> 72O7C20==O DV1@8=>35=C 7 B@<1>F8B0 <8. @8 28I8E 4>70E <>65 71V;LHC20B8AO "" (0:B82>20=89 G0AB:>289 B@<1>?;0AB8=>289 G0A) B0 '(0:B82>20=89 G0A 73>@B0==O). 1V;LH5==O "" B0 '=5 :>@5;NT ;V=V9=> 7V 71V;LH5=>N 0=B8B@<1>B8G=>N 0:B82=VABN 5=>:A0?0@8=C =0B@VN V, B0:8< G8=><, =5 T ?V4E>4OI8< V 4>AB>2V@=8< 4;O <=>VB>@8=3C 0:B82=>ABV 5=>:A0?0@8=C =0B@VN.

0AB>AC20==O C ?5@V>4 203VB=>ABV 01> 3>4C20==O 3@C44N.

03VB=VABL.

@>DV;0:B8G=5 ;V:C20==O 2?@>4>26 B@8<5AB@C 203VB=>ABV. ;V=VG=8E 40=8E AB>A>2=> <>6;82>W B5@0B>35==>W 01> D5B>B>:A8G=>W 4VW 5=>:A0?0@8=C ?@8 ?@>DV;0:B8G=>AC20==O ?@5?0@0BC 2?@>4>26 B@8<5AB@C 203VB=>ABV =54>AB0B=L>. # O:>ABV 70?>1V6=>3> 70E>4C =5 A;V4 70AB>A>2C20B8 5=>:A0?0@8= 7 ?@>DV;0:B8G=>N <5B>N 2?@>4>26 ?5@H>3> B@8<5AB@C 203VB=>ABV. /:I> ?;0=CTBLAO ?@>2>48B8 5?V4C@0;L=C 0=5AB57VN, B> ?@>DV;0:B8G=5 70AB>AC20==O 35?0@8=C A;V4 ?@8?8=8B8, O:I> T B0:0<>6;82VABL, I>=09<5=H5 70 12 3>48= 4> ?@>2545==O 0=5AB57VW.

@>DV;0:B8G=5 ;V:C20==O 2?@>4>26 B0 B@8<5AB@V2 203VB=>ABV. 2545==O ?@>DV;0:B8G=8E 4>7 5=>:A0?0@8=C >1<565=V9 :V;L:>ABV 6V=>: C B0 B@8<5AB@0E 203VB=>ABV =5 ?@8725;> 4> 28=8:=5==O 1C4L-O:8E B5@0B>35==8E 01> D5B>B>:A8G=8E O28I. 4=0: =5>1EV4=5 ?@>2545==O ?>40;LH8E 4>A;V465=L 7 <5B>N >FV=:8 2?;82C ?@5?0@0BC C B0:8E ?0FVT=B>:. "0:8< G8=><, 70AB>AC20==O ?@>DV;0:B8G=8E 4>7 5=>:A0?0@8=C C B0 B@8<5AB@0E <>6;825 BV;L:8 C 28?04:C, O:I> C FL>B@510.

/:I> ?;0=CTBLAO ?@>2>48B8 5?V4C@0;L=C 0=5AB57VN, B> ?@>DV;0:B8G=5 70AB>AC20==O 35?0@8=C A;V4 ?@8?8=8B8, O:I> T B0:0<>6;82VABL, I>=09<5=H5 70 12 3>48= 4> ?@>2545==O 0=5AB57VW.

5@V>4 3>4C20==O 3@C44N. A:V;L:8 30AB@>V=B5AB8=0;L=0 01A>@1FVO C =>2>=0@>465=8E C ?@8=F8?V T <0;>9<>2V@=>N, 6V=:0<, O:V 3>4CNBL 3@C44N, ;V:C20==O 5=>:A0?0@8=>=5 ?@>B8?>:070=5.

40B=VABL 2?;820B8 =0 H284:VABL @50:FVW ?@8 :5@C20==V 02B>B@0=A?>@B< 01> V=H8<8 <5E0=V7<0<8.

@89>< ?@5?0@0BC =5 2?;820T =0 740B=VABL :5@C20B8 02B>B@0=A?>@B=8< 70A>1>< B0 ?@0FN20B8 7 <5E0=V7<0<8. @>B5 A;V4 1CB8 >15@56=8<8 7 >3;O4C =0 <>6;82V ?>1VG=V @50:FVW (482. @>74V; <<>1VG=V @50:FVW»).

!/?>AVI 70AB>AC20==O B0 4>78.

0AB>A>2C20B8 4;O ?V4H:V@=>3> 22545==O (70 28=OB:>< 70AB>AC20==O ?V4 G0A 35<>4V0;V7C).

&O D>@<0 28?CA:C ?@87=0G5=0 4;O 4>@>A;8E.

@5?0@0B =5 <>6=0 22>48B8 2=CB@VH=L<>O7>2>.

1 <; @>7G8=C 4;O V=T:FV9 5:2V20;5=B=89 ?@81;87=> 10 000 0=B8-%0 5=>:A0?0@8=C.

"5E=V:0 ?V4H:V@=>3> 22545==O. >?5@54=L> =0?>2=5=89 H?@8F 3>B>289 4> 70AB>AC20==O. 5 A;V4 =0B8A:0B8 =0 ?>@H5=L H?@8F0 7 <5B>N 2840;5==O ?CE8@FV2 ?>2VB@O ?5@54 ?@>2545==O< V=T:FVW.

=>:A0?0@8= A;V4 22>48B8 V=T:FV9=8< H;OE<< C ?V4H:V@=V B:0=8=8. 060=>, I>1 ?V4 G0A V=T:FVW ?0FVT=B 7=0E>482AO C ?>;>65==V ;560G8 =0 A?8=V. VAFO 22545==O ?@5?0@0BC A;V4 G5@3C20B8, ?@>2>4OG8 V=T:FVW B> C ;V2C, B> C ?@02C ?5@54=L>;0B5@0;L=C G8 704=L>;0B5@0;L=C 4V;O=:C G5@52=>W ABV=:8.

>;:C A;V4 22>48B8 =0 2AN 4>268=C C A;;04:C H:V@8, 7V1@0=C

030;L=V @5:><5=40FVW. #?@>4>26 CAL>3> ?5@V>4C ;V:C20==O A;V4 @53C;O@=> :==B@>;N20B8 :V;L:VABL B@>1>F8BV2, >A:V;L:8 VA=CT @878: 28=8:=5==O 35?0@8=V=4C:>20=>W B@><1>F8B>?5=VW (") (482. @>74V; <<A>1;82>ABV 70AB>AC20==O»).

@>DV;0:B8:0 25=>7=>W B@><1>5<1>;VW ?@8 ?@>2545==V EV@C@3VG=8E 2B@CG0=L. &V @5:><5=40FVW, O: ?@028;>, AB>ACNBLAO EV@C@3VG=8E 2B@CG0=L, I> ?@>2>4OBLAO ?V4 7030;L=>N 0=5AB57VTN.

@8 ?@>2545==V A?V=0;L=>W B0 5?V4C@0;L=>W 0=5AB57VW A;V4 @5B5;L=> 72068B8 :>@8ABL ?5@54>?5@0FV9=>3> 22545==O 5=>:A0?0@8=C B0 B5>@5B8G=5 7@>AB0==O @878:C 28=8:=5==O A?V=0;L=>W 35<0B><8 (482. @>74V; <<A>1;82>ABV 70AB>AC20==O»).

!E5<0 22545==O. 2>48B8 1 V=T:FVN =0 4>1C.

>7C20==O. >7C A;V4 287=0G0B8 70;56=> 2V4 @878:C, I> VA=CT C ?0FVT=B0, B0 B8?C EV@C@3VG=>3> 2B@CG0==O.

%V@C@3VG=5 2B@CG0==O, I> AC?@>2>46CTBLAO ?> @8 EV@C@3VG=8E 2B@CG0==OE, I> AC?@>2>46CNBLAO ?> (0,2 <); ?@5?0@0BC.

> 4>1@5 282G5=8E @5687C20==O =0;568BL @568<, ?@8 O:>

%V@C@3VG=5 2B@CG0==O, I> AC?@>2>46CTBLAO 28A>:8< B@><1>35==8< @878:> %V@C@3VG=V 2B@CG0==O =0 :C;LH>2>;V==>10E: 4>70 AB0=>28BL 4000 0=B8-%0 (0,4 <); V 22>48BLAO 1 @07 =0 4>1C.

> 4>1@5 282G5=8E @5687C20==O =0;568BL @568<, ?@8 O:>
=HV A8BC0FVW.>;8 VA=CT ?V428I5=89 @878: 28=8:=5==O B@<1>5<1>;VW, 7C<>2;5=89 B8?<< EV@C@3VG=>3> 2B@CG0==O (7>:@5<0 ?@8
EV@C@3VG=8E 2B@CG0==OE 7 ?@82>4C >=:>;>3VG=8E E2>@>1) B0/01> >A>1;82>ABO<8 ?0FVT=B0 (7>:@5<0 ?@8 =0O2=>ABV 25=>7=>W B@>
<1>5<1>;VW 2 0=0<=57V), =5>1EV4=> 22>48B8 ?@>DV;0:B8G=C 4>7C, V45=B8G=C BV9, I> 70AB>A>2CTBLAO ?@8 EV@C@3VG=8E 2B@CG0==OE
V7 28A>:8< @878:<< 28=8:=5==O B@><1>5<1>;VW, B0:8E O: >?5@0FVW B0 :>;V==>2>10E.

"@820;VABL ?@>DV;0:B8G=>3> ;V:C20==O.@>DV;0:B8G=5 ;V:C20==O V7 70AB>AC20==O< (=87L:<>;5:C;O@=8E 35?0@8=V2), @07>< 7V
728G09=8< 18=BC20==O< =V3 5;0AB8G=8< 18=B><, A;V4 ?@>4>26C20B8 4>B8, 4>:8 ?>2=VABN =5 2V4=>28BLAO @CE;82VABL ?0FVT=B0.
7030;L=>EV@C@3VG=V9 ?@0:B8FV B@820;VABL 70AB>AC20==O =5 ?>28==0 ?5@528IC20B8 10 4=V2, 70 28=OB:<< 28?04:V2, :>;8 VA=CT
@878: 28=8:=5==O B@><1>7C, ?>2O70=89 7 >A>1;82>ABO<8 AB0=C ?0FVT=B0 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

C;0 4>2545=0 B5@0?52B8G=0 :>@8ABL ?@>DV;0:B8G=>3> ;V:C20==O, O:5 ?>;O30T C I>45==>.A0?0@8=C =0B@VN =0 4>1C 2?@>4>26 4-5
B86=V2, ?VA;O ?@>2545==O EV@C@3VG=>3> 2B@CG0==O =0 :C;LH>2>1V.

;O ?0FVT=BV2, C O:8E 2A5 I5 715@V30TBLAO @878: 28=8:=5==O 25=>7=>W B@><1>5<1>;VW ?VA;O ;V:C20==O, B@820;VABL O:>3> 2V4?>2V40;0
@5:><5=4>20=V9, =5>1EV4=> ?@>4>268B8 ?@>DV;0:B8G=5 ;V:C20==O, 7>:@5<0 H;OE<< 70AB>AC20==O ?5@>@0;L=8E 0=B8:>03C;O=BV2.
4=0: >FV=:0 ;V=VG=>W :>@8ABV 2V4 B@820;>3> ;V:C20==O =87L:<>;5:C;O@=8<8 35?0@8=0<8 01> ?5@>@0;L=8<8 0=B8:>03C;O=B0<8 ?>:8 I> =5
?@>2>48;0AO.

@>DV;0:B8:0 B@><1>7C 3;81>:8E 25= ?@8 3>AB@8E B5@0?52B8G=8E 70E2>@N20==OE.

>7C20==O. >70 AB0=>28BL 40<3 01> 4000 0=B8-%0 /0,4 <; V 22>48BLAO ?V4H:V@=> 1 @07 =0 4>1C.

"@820;VABL ?@>DV;0:B8G=>3> ;V:C20==O.C;0 4>2545=0 :>@8ABL 2V4 ;V:C20==O, B@820;VABL O:>3> AB0=>28BL 2V4 6 4> 14 4=V2. 0 40=89
G0A =5<0T 40=8E AB>A>2=> 5D5:B82=>ABV B0 157?5:8 ?@>DV;0:B8G=>3> ;V:C20==O B@820;VABN ?>=04 14 4=V2. /:I> @878: 28=8:=5==O
25=>7=>W B@><1>5<1>;VW 2A5 I5 715@V30TBLAO, A;V4 ?@>2>48B8 B@820;5 ?@>DV;0:B8G=5 ;V:C20==O V7 70AB>AC20==O< ?5@>@0;L=8E
0=B8:>03C;O=BV2.

@>DV;0:B8:0 B@><1>CB2>@5==O 2 5:AB@0:>@>@0;L=>=BC@V :@>2>>1V3C ?V4 G0A 35<>4V0;V7C.

@5?0@0B 22>48B8 2=CB@VH=L>AC48==> (2 0@B5@V0;L=C <03VAB@0;L :>=BC@C 4;O 35<>4V0;V7C).

?0FVT=BV2, O:8< ?@>2>4OBLAO ?>2B>@=V ?@>F54C@8 35<>4V0;V7C, ?@>DV;0:B8:0 B@><1>CB2>@5==O 2 5:AB@0@5=0;L=V9 A8AB5
G8I5==O :@>2V 4>AO30TBLAO H;OE<< 22545==O ?>G0B:>2>W 4>78 100 0=B8-%0 /:3 2 0@B5@V0;L=C <03VAB@0;L :>=BC@C 4;O 4V0;V7C =0
?>G0B:C ?@>F54C@8.

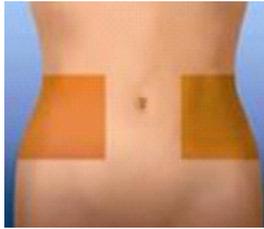
&N 4>7C, O:0 22>48BLAO C 283;O4V >4=>@07>2>W 2=CB@VH=L>AC48==>W 1>;NA=>W V=T:FVW, 70AB>A>2C20B8 O:I> ?@>F54C@0 35
<>4V0;V7C B@820T =5 1V;LH5 4 3>48=. # ?>40;LH>

0:A8<0;L=0 @5:><5=4>20=0 4>70 AB0=>28BL 100 0=B8-%0 /:3 <0A8 BV;0.

/:I> C ?0FVT=BV2, O:8< ?@>2>48BLAO 35<>4V0;V7, VA=CT 28A>:89 @878: 28=8:=5==O :@>2>B5GV (7>:@5<0 ?@8 35<>4V0;V7V, I> ?@>2>48BLAO
4> G8 ?VA;O ?>5@0FVW) 01> A?>AB5@V30TBLAO 0:B82=0 :@>2>B5G0, 4V0;V7<>6=0 ?@>2>48B8 V7 70AB>AC20==O< 4>78 50 0=B8-%0 /:3
(?@8 ?>42V9=>ABC?V) 01> 75 0=B8-%0 /:3 (?@8 >48=0@=>ABC?V).

=AB@C:FVW I>4> A0<>ABV9=>3> 2545==O ?@5?0@0BC ;5:A0=® C H?@8F-4>7V 7 70E8A=>N A8AB5<>N 3>;:8

1. □8<8B8 @C:8 B0 4V;O=:C, C O:C 1C45 28:>=C20B8AO V=T:FVO ?@5?0@0BC, 2>4>N 7 <8;>
2. ?52=8B8AL C B> 4>1@5 284=> 48B8 ?@5?0@0B.
3. 1@0B8 4V;O=:C C ?@02V9 01> ;V2V9 G0AB8=V 682>B0. ?O=:0<0T 1CB8 2V440;5=0 (C =0?@O 1>:V2) 2V4 ?C?:0 I>=09<5=H5 =0 5 A0=B8<5B@V2.



4. C ?@02C B0 ;V2C AB>@>=8 682>B0, 70;56=> 2V4 B>3>, 2 O:C AB>@>=C 1C;> 7@>1;5=> V=T:FVN<8=C;>3> @07C. G8ABVB8 < 7V A?8@B>



5. 15@56=> 7=OB8 :>2?0G>: 7 3>;8, ?@8T4=0=>W 4> H?@8F0 7 ?@5?0@0B<< ;5:A0=®. 8:8=CB8 F59 :>2?0G>:. (?@8F T ?>?5@54=L> =0?>2=5=8< V 3>B>28< 4> 28:>@8AB0==O. =0B8A:0B8 =0 ?>@H5=L 4> 28:>=0==O V=T:FVWI>1 ?>71CB8AO 1C;L10H>: ?>2VB@O. &5 <>65 ?@8725AB8 4> 2B@0B8 ;V:0@AL:>3> 70A>1C. VA;O B>3>, O: 7=OB> :>2?0G>:, =5 4>?CA:0B8, I>1 3>;:0 B>@:0;0AO G>3>=51C4L. &5 =5>1EV4=> 4;O 70157?5G5==O B>3>, I> 3>;:0 1C45 70;8H0B8AO G8AB>N (AB5@8;L=>N).



6. "@8<0B8 H?@8F C @CFV B0:, O: >;V25FL ?@8 ?8ALN @C:>N 7;53:0 27OB8 >G8I5=C 4V;O=:C 682>B0 2:07V2=8< V 25;8:8< ?0;LFO<8, I>1 CB2>@8;0AO A:;04:0 H:V@8. 1>2'O7:>2> CB@8BO3<< CAVTW V=T:FVW.



7. "@8<0B8 H?@8F B0:8< G8=><, I>1 3>;:0 1C;0 A?@O<>20=0 4>=87C (25@B8:0;L=> ?V4 :CB<< 90°). 25AB8 3>;:C C H:V@=C A:;04:C =0 ?>2=C 4>268=C.



8. 0B8A=CB8 ?>@H5=L H?@8F0 ?0;LF52O7:>2> CB@8BO3<< CAVTW V=T:FVW.
9. 25AB8 3>;:C, 28BO3CNG8 WW ?@O<> C 72>@>B=>;:0 02B<<0B8G=> 2:@8TBLAO 70E8A=8< G>E;> 4@07C 6 28:8=CB8 H?@8F C =091;86G89
 :=>B59=5@ 4;O 3>AB@8E ?@54<5BV2.
 @8 70E8A=0 A8AB5<0, O:0 ?@872>48BL 4> CB2>@5==O 70E8A=>3> G>E;0, <>65 1CB8 0:B82>20=0 ;8H5 ?VA;O 28?>@>6=5==O H?@8F0
 =0B8A:0==O< ?>@H=O 4> :V=FO.
 ;O C=8:=5==O CB2>@5==O A8=FO =5 @>7B8@0B8 .



VB8. '5@57 2V4ACB=VABL 2V4?>2V4=8E 40=8E =5 @5:>5=4CTBLAO 70AB>A>2C20B8 C ?54V0B@8G=V9 ?@0:B8FV.

5@54>7C20==O.

8?04:>25 ?5@54>7C20==O ?@8 ?V4H:V@=>
 # @07V :@>2>B5GV 4;O ;V:C20==O 45O:8E E2>@8E <>6=0 70AB>A>2C20B8 ?@>B02CNG8 B0:V D0:B>@8:
 - 5D5:B82=VABL ?@>B0=86G0, =V6 5D5:B82=VABL, 70@5TAB@>20=0 ?@8 ?5@54>7C20==V =5D@0:FV9=>3> 35?0@8=C;
 - G5@57 ?>1VG=V 5D5:B8 (7>:@5<0 0=0DV;0:B8G=89 H>:) A;V4 A?>G0B:C @5B5;L=> 72068B8 A?V22V4=>H5==O @878:/:>@8ABL 70AB>AC20==O
 ?@>B0
 59B@0;V70FVN 74V9A=N20B8 H;OE<< ?>2V;L=>3> 2=CB@VH=L>25==>3> 22545==O ?@>B0 3V4@>E;>@84C).
 5>1EV4=0 4>70 ?@>B0
 - 2V4 22545=>W 4>78 35?0@8=C (100 ?@>B835?0@8=>28E >48=8FL ?@>B0<>;5:C;O@=>3> 35?0@8=C), O:I> 7 <<<5=BC 22545==O 5=>:A0?0@8=C
 =0B@VN ?@>9H;> =5 1V;LH5 8 3>48=;
 - 2V4 G0AC, I> ?@>9H>2 7 <<<5=BC 22545==O 35?0@8=C:
 - <<6=0 ?@>25AB8 V=DC7VN 50 ?@>B835?0@8=>28E >48=8FL ?@>B0:A0?0@8=C =0B@VN, O:I> 7 <<<5=BC 22545==O 5=>:A0?0@8=C =0B@VN
 ?@>9H;> 1V;LH5 8 3>48=, 01> O:I> ?>B@V1=0 4@C30 4>70 ?@>B0
 - O:I> 7 <<<5=BC V=T:FVW 5=>:A0?0@8=C =0B@VN ?@>9H;> 1V;LH5 12 3>48=, =5<0T =5>1EV4=>ABV 22>48B8 ?@>B0

&V @5:><5=40FVW AB>ACNBLAO E2>@8E 7 =>@<0;L=>N =8@:>2>N DC=:FVTN, O:V >B@82B>@=V 4>78.

4=0: ?>2=VABN =59B@0;V7C20B8 0=B8-%0 0:B82=VABL 5=>:A0?0@8=C =5<>6;82>.

V;LH5 B>3>, =59B@0;V70FVO <>65 <0B8 ;8H5 B8289 E0@0:B5@ 2=0A;V4>: >A>1;82>AB59 D0@<0:>:V=5B8:8 2A<>:BC20==O =87L:><>;5:C;O@=>3> 35?0@8=C, 2 @57C;LB0BV G>3> <>65 28=8:=CB8 =5>1EV4=VABL @>7?>4V;8B8 7030;L=C @>7@0E>20=C 4>7C ?@>B0 @8 ?>B@0?;O==V =87L:><>;5:C;O@=>3> 35?0@8=C 2 H;C=>:, =02VBL C 25;8:8E :V;L:>ABOE, BO6:V CA:;04=5==O T<0;>9<>2V@=8<8 (B0:8E 28?04:V2 70@5TAB@>20=> =5 1C;>) 2=0A;V4>: =57=0G=>3> 2A<>:BC20==O ;V:0@AL:>3> 70A>1C C H;C=:C B0 :8H5G=8:C.

>1VG=V @50:FVW.

C;8 70@5TAB@>20=V 28?04:8 7=0G=8E 35<>@03VG=8E CA:;04=5=L, 450:V 7 =8E 1C;8 ;5B0;L=8<8. 5G0AB8<8 ?>1VG=8<8 @50:FVO<8 1C;8 2=CB@VH=L>G5@5?=V B0 @5B@>?5@8B>=50;L=V :@>2>28;828. "0:>6 @5TAB@C20;8AO 28?04:8 35<>@03VG=8E CA:;04=5=L (:@>2>B5GV), B0:8E O: 35<0B><0, 5:EV<>7 C

5<>@03VG=V ?@>O28. >=8 3>;>2=8< G8=>< ?>2O70=V:

- V7 AC?CB=V<8 D0:B>@0<8 @878:C: =0O2=VABL >@30=VG=8E C@065=L, I<>0NBL AE8;L=VABL 4> :@>2>B5GV, ?52=V :x1V=0FVW ;V:0@AL:8E 70A>1V2 (482. @>74V; «@>B8?>.070==O» B0 «□70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»), 2V:; =8@:>20 =54>AB0B=VABL, =87L:0<0A0 BV;0.

- 7 =54>B@8<0==O< B5@0?52B8G=8E @5:><5=40FV9, 7>:@5<0 B0:8E, I> AB>ACNBLAO B@820;>ABV ;V:C20==O B0 :>@5:FVW 4>78 2V4?>2V4=> 4> <0A8 BV;0 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

0@5TAB@>20=> =5G0ABV 28?04:8 A?V=0;L=>W 35<0B><8 ?VA;O 22545==O =87L:><>;5:C;O@=>3> 35?0@8=C ?V4 G0A A?V=0;L=>W 0=5AB57VW, 0=0;357VW 01> 5?V4C@0;L=>W 0=5AB57VW.

&V ?>1VG=V O28I0 A?@8G8=O;8 =52@>;>3VG=V CH:>465==O @V7=>3> ABC?5=O BO6:>ABV, 2 B>ABV9=89 ?0@0;VG (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

VA;O ?V4H:V@=>W V=T:FVW<>6;825 CB2>@5==O 35<0B><8 C C;8 70@5TAB@>20=V 28?04:8 1>;N C &59 @878: ?V428ICTBLAO ?@8 =54>B@8 <0==V @5:><5=4>20=>W B5E=V:8 ?@>2545==O V="T:FV9 B0 ?@8 28:>@8AB0==V =52V4?>2V4=>3> V=T:FV9=>3><0B5@V0;C. # @57C;LB0BV 70?0;L=>W @50:FVW <>6CBL 28=8:=CB8 2C7;8:8 C

!>AB5@V30;>AO 28=8:=5==O B@><1>F8B>?5=VW. A=CT 420 WW B8?8.

"8? , B>1B> =09@>7?>2AN465=VHV 28?04:8, 70728G09 ?>3> ABC?5=O BO6:>ABV (1V;LH5 100000<<3), 7O2;ONBLAO =0 @0==VE 5B0?0E (4> 5 4=O) V =5 ?>B@51CNBL ?@8?8=5==O ;V:C20==O.

"8? , B>1B> =5G0ABV 28?04:8 BO6:>W V0;5@3VG=>W B@><1>F8B>?5=VW (") 7 B@><1>7><, C 450:8E 28?04:0E B@><1>7 1C2 CA:;04=5=89 V=D0@:B0<8 >@30=V2 01> VH5:. '0AB>B0 28=8:=5==O 4>A;V465=0 =54>AB0B=L> (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

>6;825 157A8<=5 B0 >1>@>B=5 ?V428I5==O @V2=O B@><1>F8BV2.

@8 70AB>AC20==V 35?0@8=V2 1C;8 70@5TAB@>20=V ?>>48=>:V 28?04:8 =5:@>7C H:V@8, ?5@5206=> C ?@8?8=8B8 B5@0?VN.

8=8:0;8 =5G0ABV ?@>O28 A8AB5<=8E 0;5@3VG=8E @50:FV9 (0=0DV;0:B8G=V/0=0DV;0:B>W4=V @50:FVW, 2;;NG0NG8 H>:) 01> @50:FV9 7 1>:C H:V@8 (:@>?82O=:0, A25@1V6, 5@8B5<0, 1C;L>7=V 28A8?0==O), O:V 2 ?52=8E 28?04:0E <>3;8 ?@872>48B8 4> ?@8?8=5==O ;V:C20==O.

/: V ?@8 70AB>AC20==V =5D@0:FV9=8E 35?0@8=V2, =5 28;;NG5=0 <>6;82VABL @>728B:C>AB5>?>@>7C ?@8 ?>4>265==V B@820;>ABV ;V:C20==O.

5D@0:FV=>=>20=V 35?0@8=8 <>6CBL A?@8G8=OB8 3V?>0;L4>AB5@>=V7<, O:89 ?@872>48BL 4> 71V;LH5==O ?;07<>28E @V2=V2 :0;VN. V4:> <>65 28=8:=CB8 ;;V=VG=> 7=0GCI0 3V?5@:0;VTA>1;82> C ?0FVT=BV2 7 E@>=VG=>N =8@:>2>N =54>AB0B=VABN B0 FC:@>28< 4V015B> >2V4><<O;>AO ?@> 28?04:8 B@0=78B>@=>3> ?V428I5==O @V2=V2 B@0=A0F5;N;O@=>3> 01> E>;5AB0B8G=>3> C@065==O ?5GV=:8.

0@5TAB@>20=> 45;V;L:0 28?04:V2 3V?5@:0;VT.

>2V4><;O;>AO ?@> 28=8:=5==O 3>;>2=>3> 1>;N, 0;>?5FVW.

0@5TAB@>20=> 4C65 @V4:V 28?04:8 20A:C;VBC 2=0A;V4>: ?V428I5==O GCB;82>ABV H:V@8.

>A8BL @V4:> 28=8:0;0 3V?5@5>78=>DV;VO, O: V7>;L>20=>, B0: V =0 B;V H:V@=8E @50:FV9, O:0 7=8:0;0 ?VA;O ?@8?8=5==O ;V:C20==O.

"5@ABV.3 @>:8.

#<>28 715@V30==O. 15@V30B8 C =54>ABC?=>. 5 70<>@>6C20B8.

#?0:>2:0. 10 (2E5): ?> 0,4 <; C H?@8F-4>7V 7 70E8A=>N A8AB5<>N 3>;:8, ?> 2 H?@8F-4>78 C 1;VAB5@V; ?> 5 1;VAB5@V2 C :0@B>==V9 :>@>1FV.

0B53>@VO 2V4?CA:C. 0 @5F5?B>

8@>1=8:. !0=>DV V=B@>? =40AB@V0, \$@0=FVO.

VAF57=0E>465==O 28@>1=8:0 B0 9>3> 04@5A020465==O 4VO;L=>ABV.

180 @N 0= >@5A 94700 -, \$, \$@0=FVO.

01>

C;L20@ =4CAB@VT;L @><8A;>20 7>=0 76580 □L> "@5, \$@0=FVO.

002=8:. "«!0=>DV-25=BVA #: @0W=0», #: @0W=0.

=AB@C:FVO 4;O H?@8F-4>78 8000 0=B8-%

!;:04:

4VNG0 @5G>28=0: 5=>:A0?0@8=;

1 <; @>7G8=C 100 <3 5=>:A0?0@8=C =0B@VN;

1 H?@8F-4>70

4>?>28=0: 2>40 4;O V=T:FV9.

V:0@AL:0 D>@<0. >7G8= 4;O V=T:FV9.

A=>2=V DV78:>-EVABV: 15710@2=89 01> 1;V4>-6>2B>3> :>;L>@C, ?@>7>@89 @>7G8=.

\$0@<0:>B5@0?52B8G=0 3@C?0. □=B8B@><1>B8G=V 70A>18. @C?0 35?0@8=C. >4 "% 0105.

\$0@<0:>;>3VG=V 2;0AB82>ABV.

\$0@<0:>48=0

=>:A0?0@8= T =87L:><;5:C;O@=8< 35?0@8=><, C O:>3> 0=B8B@><1>B8G=0 B0 0=B8:>03C;O=B=0 0:B82=VABL AB0=40@B=>3> 35?0@8=C =5 ?>2O70=V 1>N. > 28I0 0=B8-%0 0:B82=VABL, =V6 0=B8-0 01> 0=B8B@><1V=>20 0:B82=VABL. ;O 5=>:A0?0@8=C A?V22V4=>H5==O F8E 42>E 284V2 0:B82=>ABV AB0=>28BL 3,6.

?@>DV;0:B8G=8E 4>70E 2V= =5 <0T 7=0G=>W 4VW =0 "".

0?V:C 0:B82=>ABV ;V:C20;L=8E 4>7 "" <>65 1CB8 2 1,5-2,2 @070 1V;LH5 :>=B@>;L=>3> G0AC. &5 ?>4>265==O 2:07CT =0 70;8H:>2C 0=B8B@> <1V=>2C 4VN.

V:C20==O 3>AB@>3> V=D0@:BC :0@40 7 ?V49><>< A53<5=B0 ST C :><1V=0FVW 7 B@><1>;VB8G=8< 70A>I>< C E2>@8E, C O:8E

?@>2>48BLAO ?>40;LH0 :>@>=0@=0 0=3V>?;0AB8:0, 0 B0:>6 C E2>@8E, O:8< FO ?@>F54C@0 =5 ?@>2>48BLAO. # 25;8:>F5=B@>2>A;V465==V 20479 E2>@8E 7 3>AB@8< V=D0@:B< :0@40 7 ?V49><>< A53<5=B0 ST ?VA;O B>3>, O: 2>=8 >B@8<0;8 DV1@8=>;VB8G=C B5@0?VN, 1C;8 @0=4> 20=> @>7?>4V;5=V =0 3@C?8 4;O >B@8<0==O 01> 5=>:A0?0@8=C C 283;O4V 1>;NA=>W 2=CB@VH=L>25==>W V=T:FVW 3000 0=B8-%0 , A;V4< 70 O:>N =5309=> ?V4H:V@=> 22>48;8 4>7C 100 0=B8-%0 /:3, ?>BV< ?@>2>48;8 ?V4H:V@=V V=T:FVW ?> 100 0=B8-%0 /:3 :>6=V 12 3>48=, 01> 4;O 22545==O 2=CB@VH=L>25==>3> =5D@0:FV9=>3> 35?0@8=C C 283;O4V 1>;NA=>W V=T:FVW 60 /:3 (<O:A8 0:B82>20=>3> G0AB:>2>3> B@> <1?>;0AB8=>2>3> G0AC. V4H:V@=V V=T:FVW 5=>:A0?0@8=C ?@>2>48;8 4> 28?8A:8 7V AB0FV=>0@C 01> =5 1V;LH5 8 3>48= (C 75 % 28?04:V2 =5 <5=H5 6 4=V2). >;>28=V E2>@8E, O:V >B@8

E>4V 4>A;V465==O 4716 (23 %) E2>@8< 1C;0 ?@>2545=0 :>@>=0@=0 0=3V>?;0AB8:0 =0 B;V 0=B8B@><1>B8G=>W B5@0?VW V7 70AB>AC20==O < 70<0A:>20=8E 4>A;V46C20=8E ?@>5?0@0BV2. %2>@V =5 >B@840B:>2V 4>78, O:I> 7 <><5=BC >AB0==L>W ?V4H:V@=>W V=T:FVW 5=>:A0?0@8=C 4> @>74C20==O 10;>=0 ?@>9H;> <5=H5 8 3>48=, 01> 6 >B@8;NA=C 2=CB@VH=L>25==C V=T:FVN 5=>:A0?0@8=C C 4>7V 30 0=B8-%0 /:3, O:I> 7 <><5=BC >AB0==L>W ?V4H:V@=>W V=T:FVW 5=>:A0?0@8=C 4> @>74C20==O 10;>=0 ?@>9H;> 1V;LH5 8 3>48=.

=>:A0?0@8= 4>72>;82 7=0G=> 7<5=H8B8 G0AB>BC ?>4V9, O:V 2V4?>2V40NBL ?5@28==8< :V=F528< B>G:0< (:><1V=>20=0 :V=F520 B>G:0, I> 2;;NG0T 2 A515 @5F8482 V=D0@:BC :0@40 B0 A<5@B=VABL 7 1C4L-O:>W ?@8G8=8, O:V<0;8 BO3>< 30 45==>3> ?5@V>4C A?>AB5@565==O ?VA;O 2;;NG5==O C 4>A;V465==O: 9,9 % 2 3@C?V 5=>:A0?0@8=C ?>@V2=O=> 7 12 % C 3@C?V =5D@0:FV9=>3> 35?0@8=C (7=865==O 2V4=>A=>3> @878:C 17 % (@<0,001)). '0AB>B0 @5F8482C V=D0@:BC :0@40 1C;0 7=0G=> =86G0 2 3@C?V 5=>:A0?0@8=C (3,4 % ?>@V2=O=> 7 5 %, @<0,001, 7=865==O 2V4=>A=>3> @878:C 31 %). 5B0;L=VABL 1C;0 =86G0 2 3@C?V 5=>:A0?0@8=C, >4=0: @V7=8FO 5@52030 5=>:A0?0@8=C, 7 B>G:8 7>@C ?5@28==>W :V=F52>W B>G:8 ?>:07=8:0, 1C;0 15770AB5@56=>N =5 70;56=> 2V4 ?V43@C?8 (2V.; AB0BL, ;>:0;V70FVO V=D0@:BC :0@40, 4V015B 01> V=D0@:B :0@40 2 0=0=<57V, B8? ?@87=0G5=>3> B@><1>;VB8:0 B0 ?@>: G0AC O2>N ?5@H8E ;;V=VG=8E >7=0: B0 ?>G0B:>< ;V:C20==O).

=>:A0?0@8= ?@>45<>=AB@C202 7=0G=C ?5@5203C, ?>@V2=O=> 7 =5D@0:FV9=8< 35?0@8=><, 7 B>G:8 7>@C ?5@28==>3> :@8B5@VN 5D5:B82=>ABV O: C E2>@8E, O:V ?5@5=5A;8 :>@>=0@=C 0=3V>?;0AB8:C 2 30-45==89 ?5@V>4 ?VA;O 2;;NG5==O C 4>A;V465==O (10,8 % ?>@V2=O=> 7 13,9 %, 23 % 7=865==O 2V4=>A=>3> @878:C), B0: V C E2>@8E, O:8< :>@>=0@=C 0=3V>?;0AB8:C =5 ?@>2>48;8 (9,7 % ?>@V2=O=> 7 11,4 %, =0 15 % 7=865==O 2V4=>A=>3> @878:C).

'0AB>B0 28=8:=5==O <0A82=8E :@>2>B5G 4> 30 4=O 1C;0 4>AB>2V@=> 28I>N 2 3@C?V 5=>:A0?0@8=C (2,1 %) ?>@V2=O=> 7 3@C?>N 35?0@8=C (1,4 %). '0AB>B0 H;C=>2>-.8H:>28E :@>2>B5G 1C;0 28I0 2 3@C?V 5=>:A0?0@8=C (0,5 %), =V6 2 3@C?V 35?0@8=C (0,1 %), B>4V O: G0AB>B0 2=CB@VH=L>G5@5?>8E :@>2>28;82V2 2 >1>E 3@C?0E 1C;0 >4=0:>2>N (0,8 % C 28?04:C 5=>:A0?0@8=C ?>@V2=O=> 7 0,7% C 28?04:C 35?0@8=C). =0;V7 :><1V=>20=8E :@8B5@VW2, 70 4>?><>3>N O:8E 287=0G0;8 ;;V=VG=C :>@8ABL, ?>:0702 AB0B8AB8G=> 7=0GCIC ?5@5203C (@<0,0001) 5=>:A0?0@8=C =04 =5D@0:FV9=8< 35?0@8=>A=>3> @878:C =0 14 % =0 :>@8ABL 5=>:A0?0@8=C (11 % ?>@V2=O=> 7 12,8 %) 4;O :><1V=>20=8E :@8B5@VW2, I> A:;040;8AO 7 ;5B0;L=>3> =0A;V4:C, @5F8482C, V=D0@:BC :0@40 B0 BO6:>W :@>2>B5GV (:@8B5@VW ") 4> 30 4=O, V 17 % (10,1 % ?>@V2=O=> 7 12,2 %) 4;O :><1V=>20=8E :@8B5@VW2, I> A:;040;8AO 7 ;5B0;L=>3> =0A;V4:C, @5F8482C V=D0@:BC :0@40 B0 2=CB@VH=L>G5@5?>3> :@>2>28;82C 4> 30 4=O.

\$0@<0>:V=5B8:0.

\$0@<0>:V=5B8G=V ?>:07=8:8 5=>:A0?0@8=C >FV=N20;8 =0 ?V4AB02V B@820;>ABV 0=B8-%0 B0 0=B8-0 0:B82=>ABV C ?;072V ?@8 @5:>
<5=4>20=8E 4>70E (20;V4>20=V 0;VB8G=V <5B>48) ?VA;O >4=>:@0B=>3> B0 ?>2B>@=>3> ?V4H:V@=>3> 22545==O V ?VA;O >4=>:@0B=>W
2=CB@VH=L>25==>W V=T:FVW.

V>4>ABC?=VABL. =>:A0?0@8=, I> 22>48BLAO ?V4H:V@=>, H284:> V <0965 ?>2=VABN 2A<:BCTBLAO (?@81;87=> =0 100 %). 0:A8<0;L=0
0:B82=VABL C ?;072V A?>AB5@V30TBLAO G5@57 3-4 3>48=8 ?VA;O 22545==O. "0:0<0:A8<0;L=0 0:B82=VABL (I> 28@065=0 C 0=B8-%0)
AB0=>28BL 0,18±0,04 (?VA;O 2000 0=B8-%0), 0,43±0,11 (?VA;O 4000 0=B8-%0) ?@8 ?@>DV;0:B8G=>
>;NA=0 2=CB@VH=L>25==0 V=T:FVO 3000 0=B8-%0 7 ?>40;LH8<8 ?V4H:V@=>8<8 V=T:FVO<8 ?> 100 0=B8-%0 /:3 :>6=V 12 3>48= ?@872>48BL 4>
4>AO3=5==O ?5@H>3> <0:A8<0;L=>3> @V2=O :>=F5=B@0FVW 0=B8D0:B>@0 %0, I> AB0=>28BL 1,16 /<; (n=16), B0 A5@54=L>3> ?>:07=8:0 ?>;IV
?V4 D0@<0>:V=5B8G=>N :@82>N, I> 2V4?>2V40T 88 % @V2=>206=>3> @V2=O. V2=>206=89 AB0= 4>AO30TBLAO =0 4@C389 45=L ;V:C20==O.
<560E @5:><5=4>20=8E 4>7 D0@<0>:V=5B8:0 5=>:A0?0@8=C T ;V=V9=>N. =CB@VH=L>V=482V4C0;L=0 B0 2B>@=8E ?V4H:V@=>8E 22545=L
74>@>28< 4>1@>2>;LFO< 4000 0=B8-%0 1 @07 =0 4>1C @V2=>206=89 AB0= 4>AO30TBLAO =0 2-9 45=L, ?@8 FL>:A0?0@8=C ?@81;87=> =0 15 %
28I0, =V6 ?VA;O >4=>@07>2>W 4>78. V25=L 0:B82=>ABV 5=>:A0?0@8=C C @V2=>206=> 65 % 28I5, =V6 ?VA;O >4=>:@0B=>W 4>78, 0<0:A8
<0;L=89 B0 2V ?VA;O ?V4H:V@=>3> 22545==O ?@81;87=> 2 10 @07V2 =86G0 70 0=B8-%0 0:B82=VABL. !5@54=O<0:A8<0;L=0 0=B8-0 0:B82=VABL
A?>AB5@V30TBLAO ?@81;87=> G5@57 3-4 3>48=8 ?VA;O ?V4H:V@=>W V=T:FVW V 4>AO30T 0,13 0=B8-0 <; ?@8 ?>2B>@=8E 22545==OE 4>78
100 0=B8-%0 /:3 420 @078 =0 4>1C.

\$0@<0>:V=5B8G=>W 270T<>4VW :A0?0@8=>< B0 B@><1>;VB8G=8< 70A>1>< ?@8 >4=>G0A=>AB5@V30;>AO.

>7?>4V; . 1□T< @>7?>4V;C 0=B8-%0 0:B82=>ABV 5=>:A0?0@8=C AB0=>28BL ?@81;87=>5 ;VB@V2 V T =01;865=8< 4> >1T2V.

5B01>;V7=>:A0?0@8= <5B01>;V7CTBLAO ?5@5206=> 2 ?5GV=FV (45AC;LD0B870FVO, 45?>;V<5@870FVO).

82545==O. VA;O ?V4H:V@=>3> 22545==O ?5@V>4 =0?V2282545==O 0=B8-%0 0:B82=>ABV C =87L:>>;5:C;O@=8E 35?0@8=V2 28189, =V6 C
=5D@0:FV9=8E 35?0@8=V2.

=>:A0?0@8=C 2;0AB825 <>=>D07=5 282545==O 7 ?5@V>4>< =0?V2282545==O ?@81;87=> 4 3>48= ?VA;O ?V4H:V@=>3> 22545==O
>4=>@07>2>W 4>78 V ?@81;87=> 7 3>48= ?VA;O 22545==O ?>2B>@=8E 4>7.

=87L:>>;5:C;O@=>3> 35?0@8=C 0=B8-0 0:B82=VABL C ?;072V 7=86CTBLAO H284H5, =V6 0=B8-%0 0:B82=VABL.

=>:A0?0@8= B0 9>3> <5B01>;VB8 282>4OBLAO G5@57 =8@:8 (=5=0A8GC20=89 <5E0=V7<) V 6>2G>282V4=V H;OE8.

8@:>289 ;V@5=A D@03<5=BV2, I> <0NBL 0=B8-%0 0:B82=VABL, AB0=>28BL ?@81;87=> 10 % 2V4 22545=>W 4>78, 0 7030;L=0 =8@:>20 5:A:@5FVO
0:B82=8E B0 =50:B82=8E @5G>28= 40 % 4>78.

@C?8 28A>:>3> @878:C.

0FVT=B8 ;VB=L>3> 2V:C. 82545==O C?>2V;L=5=5 G5@57 DV7V>;>3VG=> 7=865=C DC=:FVN =8@>: C FV9 3@C?V. &O 77C20==O B0 @568<
22545==O ?@8 ?@>DV;0:B8G=V9 B5@0?VW, O:I> =8@:>20 DC=:FVO C B0:8E E2>@8E 70;8H0TBLAO C ?@89=OB=8E <560E, B>1B> :>;8 2>=0 ;8H5
B@>E8 7=865=0.

5@54 ?>G0B:>< ;V:C20==O C E2>@8E 2V:> 2V4 75 @>:V2 =5>1EV4=> A8AB5<0B8G=> >FV=N20B8 DC=:FVW =8@>: 70 D>@N >:@>DB0 (482.

@>74V; «A>1;82>ABV 70AB>AC20==O»).

%2>@V 7;53:8< 01> ?> (:;V@5=A :@50B8=V=C >30<;/E2).

?52=8E 28?04:0E <>65 1CB8 :>@8A=8< 25AB8 A?>AB5@565==O 70 0:B82=VABN F8@:C;NNG>3> 0=B8-%0 D0:B>@0 4;O 70?>1V30==O
?5@54>7C20==N, O:I> 5=>:A0?0@8= 70AB>A>2C20B8 7 ;V:C20;L=>N<5B>N (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

;V=VG=V E0@0:B5@8AB8:8.

>:070==O.

V:C20==O 4V03=>AB>20=>3> B@<1>7C 3;81>:8E 25=, I> AC?@>2>46CTBLAO B@<1>5<1>;VTN ;535=52>W 0@B5@VW 01> 157 =5W B0 =5 <0T
BO6:8E ;V=VG=8E A8< B@<1>5<1>;VW ;535=52>W 0@B5@VW, O:0 28<030T ;V:C20==O B@<1>;VB8G=8< 70A>1><< 01> EV@C@3VG=>3>
2B@CG0==O.

V:C20==O =5AB01V;L=>W AB5=>:0@4VW B0 3>AB@>3> V=D0@:BC:0@40 157 7C1FO Q C :<<1V=0FVW 7 0F5B8;A0;VF8;>2>N :8A;>B>N.

V:C20==O 3>AB@>3> V=D0@:BC:0@40 7 ?V49<>

@>B8?>:070==O.

V428I5=0 GCB;82VABL 4> 5=>:A0?0@8=C, 35?0@8=C 01> 9>3> ?>EV4=8E, C B>>;5:C;O@=8E 35?0@8=V2.

002=VABL 2 0=0<=57V BO6:>W 35?0@8=V=4C:>20=>W B@<1>F8B>?5=VW (") B8?C , I> 1C;0 A?@8G8=5=0 =5D@0:FV=>=>20=8< 35?0@8=>< 01>
=87L:><>;5:C;O@=8< 35?0@8=>< (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

@>2>B5G0 01> AE8;L=VABL 4> :@>2>B5GV, ?>2O70=0 7 ?>@CH5==& 35<>AB07C (<>6;828< 28=OB:>< V7 FL>3> ?@>B8?>:070==O <>65 1CB8 48A5
20=5 2=CB@VH=L>AC48==5 73>@B0==O :@>2V, O:I> 2>=> =5 ?>2O70=5 7 35?0@8=>B5@0?VTN (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

@30=VG=V C@065==O, O:V 7C<>2;NNBL AE8;L=VABL 4> :@>2>B5GV.

:B82=0 ;V=VG=> 7=0GCI0 :@>2>B5G0.

=CB@VH=L><>7:>289 :@>2>28;82.

:B82=0 28@07:0 H;C=:0 01> 420=04FOB8?0;>W :8H:8.

'5@57 2V4ACB=VABL 2V4?>2V4=8E 40=8E ?@5?0@0B =5 70AB>A>2C20B8 E2>@8< 7 BO6:>N =8@:>2>N =54>AB0B=VABN (:;V@5=A :@50B8=V=C,
@>7@0E>20=89 70 D>@N>:@>DB0, 30 <:/E2), 70 28=OB:>< ?0FVT=BV2, O:V ?5@51C20NBL =0 4V0;V7V. %2>@8< V7 BO6:>N =8@:>2>N
=54>AB0B=VABN A;V4 ?@87=0G0B8 =5D@0:FV=>=>20=89 35?0@8=.

;O ?@>2545==O @>7@0EC=:C 70 D>@N>:@>DB0 =5>1EV4=> <0B8 40=V >AB0==L>3> 28 «A>1;82>ABV 70AB>AC20==O»).

!?V=0;L=C 01> 5?V4C@0;L=C 0=5AB57VN =5 A;V4 =V 2 O:>A>2C20B8 E2>@8<, O:V 7=0E>4OBLAO =0 ;V:C20==V (=87L:><>;5:C;O@=8<8 35?0@8=0
<8).

%2>@8<, O:V >B@8DV;0:B8:8, ?@>B8?>:070=0 -@53V>=0@=0 0=5AB57VO ?@8 ?;0=>28E EV@C@3VG=8E 2B@CG0==OE.

5 @5:><5=4CTBLAO 70AB>A>2C20B8 F59 ?@5?0@0B C B0:8E 28?04:0E.

@8 3>AB@>1H8@=>;>2=>3> <>7:C 7 2B@0B>N A2V4<>ABV 01> 157.

/:I> V=AC;LB A?@8G8=5=> 5<1>;VTN, C ?5@HV 72 3>48=8 ?VA;O V=AC;LBC 5=>:A0?0@8= 70AB>A>2C20B8 =5 <>6=0.

D5:B82=VABL ;V:C20;L=8E 4>7 2A5 I5 =5 287=0G5=>, =570;56=> 2V4 ?@8G8=8, >1H8@=>ABV C@065==O 01> BO6:>ABV ;V=VG=8E ?@>O2V2
V=D0@:BC 3>;>2=>3> <>7:C.

@8 3>AB@>:0@48BV (:@V< 45O:8E 70E2>@N20=L A5@FO, A?@8G8=5=8E 5<1>;VTN).

@8 =8@:>2V9 =54>AB0B=>ABV ;53:>3> 01> ?>3> ABC?5=O BO6:>ABV (:;V@5=A :@50B8=V=C 30-60<:/E2).

@V< B>3>, F59 ?@5?0@0B 7030;><=5 @5:><5=4CTBLAO ?@87=0G0B8 2 :><1V=0FVW 7 B0:8<8 70A>10<8 (482. @>74V; «□70T<>4VO 7 V=H8<8
;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»):

1. F5B8;A0;VF8;>20 :8A;>B0 C 7=51>;N20;L=8E, 60@>7=86C20;L=8E B0 ?@>B870?0;L=8E 4>70E.

2. 5AB5@>W4=V ?@>B870?0;L=V ?@5?0@0B8 () (A8AB5<=5 70AB>AC20==O).

3. 5:AB@0= 40 (?0@5=B5@0;L=5 70AB>AC20==O).

70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9.

52=V ;V:0@AL:V 70A>18 01> B5@0?52B8G=V ;:0A8<>6CBL A?@8OB8 @>728B:C 3V?5@:0;5;V :0;VN, :0;V9715@V30NGV 4VC@5B8:8, V=3V1VB>@8 ?5@5B2>@N20;L=>3> D5@<5=BC, V=3V1VB>@8 0=3V>B5=78=C , =5AB5@>W4=V ?@>B870?0;L=V ?@5?0@0B8, 35?0@8=8 (=87L:><>;5:C;O@=89 01> =5D@0:FV9=89 35?0@8=), F8:;>A?>@8= B0 B0:@>;V >728B>: 3V?5@:0;VT

878: WW 28=8:=5==O 7@>AB0T, O:I> 28I52:070=V ;V:0@AL:V 70A>18 70AB>A>2C20B8 >4=>G0A=>.

51060=V :><1V=0FVW.

0F5B8;A0;VF8;>2>N :8A;>B>N C 7=51>;N20;L=8E, 60@>7=86C20;L=8E B0 ?@>B870?0;L=8E 4>70E (V 70 0=0;>3VTN V=HV A0;VF8;0B8).

1V;LHCTBLAO @878: :@>2>B5GV (?@83=VG5==O DC=:FVW B@><1>F8BV2 ?V4 4VTN A0;VF8;0BV2 B0 C@065==O A;87>2>W >1>;>=:8 H;C=:>2> :8H:>2>3> B@0:BC). !;V4 70AB>A>2C20B8 60@>7=86C20;L=V, 7=51>;N20;L=V 70A>18, I> =5 =0;560BL 4> A0;VF8;0BV2 (=0?@8:;04, ?0@0F5B0<>);

=5AB5@>W4=8<8 ?@>B870?0;L=8<8 70A>10<8, 2:;NG0NG8 :5B>@>;0: (A8AB5<=5 70AB>AC20==O). 1V;LHCTBLAO @878: :@>2>B5GV (?@83=VG5==O DC=:FVW B@><1>F8BV2 ?V4 4VTN B0 C@065==O A;87>2>W >1>;>=:8 H;C=:>2> :8H:>2>3> B@0:BC). !:I> =5<>6;82> C=8:=CB8 >4=>G0A=>3> 70AB>AC20==O, A;V4 ?@>2>48B8 @5B5;L=5 ;;V=VG=5 A?>AB5@565==O.

45:AB@0=>< 40 (?0@5=B5@0;L=5 70AB>AC20==O). V42815=89 @878: :@>2>B5GV (?@83=VG5==O 45:AB@0=>< 40 DC=:FVW B@><1>F8BV2). ><1V=0FVW, I> ?>B@51CNBL 26820==O 70?>1V6=8E 70E>4V2.

?5@>@0;L=8<8 0=B8:>03C;O=B0<8. >A8;5==O 0=B8:>03C;O=B=>3> 5D5:BC. @8 70@0;L=8< 0=B8:>03C;O=B< A;V4 ?>A8;8B8 ;;V=VG=89 =03;04. ><1V=0FVW, O:V A;V4 2@0E>2C20B8

V=3V1VB>@0<8 03@530FVW B@><1>F8BV2 (:@V< 0F5B8;A0;VF8;>2>W :8A;>B8 C 7=51>;N20;L=8E, 60@>7=86C20;L=8E B0 ?@>B870?0;L=8E 4>70E;): 01A8:A8<01, 0F5B8;A0;VF8;>20 :8A;>B0 2 0=B803@530=B=8E 4>70E ?@8 :0@4V>;>3VG=8E B0 =52@>;>3VG=8E ?>:070==OE, 15@0?@>AB, ;;>?V4>3@5;L, A8AB5<=V 3;N:>:@B8:>AB5@>W48, 5?B8DV10B84, V;>?@>AB, B8:;>?V48=, B8@>DV10=. 1V;LHCTBLAO @878: :@>2>B5GV.

A>1;82>ABV 70AB>AC20==O.

@5?0@0B =5 4>72>;OTBLAO 22>48B8 2=CB@VH=L><□O7>2>.

87L:><>;5:C;O@=V 35?0@8=8 =5 T 270T<>70B@V1=> ?@84V;OB8 C203C B0 4>B@8=:@5B=8E A?>A>1V2 70AB>AC20==O, @5:><5=4>20=8E 4;O :>6=>3> 7 ?@5?0@0BV2 =87L:><>;5:C;O@=8E 35?0@8=V2.

0?>1V6=V 70E>48 ?@8 70AB>AC20==V.

@>2>B5G0. !: V ?@8 70AB>AC20==V CAVE V=H8E 0=B8:>03C;O=V2,<>6;825 28=8:=5==O :@>2>B5GV (482. @>74V; «>1VG=V @50:FVW»). @8 @>728B:C :@>2>B5GV A;V4 287=0G8B8 WW ?@8G8=C B0 ?@87=0G8B8 2V4?>2V4=5 ;V:C20==O.

\$C=:FVO =8@>.: 5@H =V6 ?>G0B8 ;V:C20==O =87L:><>;5:C;O@=8< 35?0@8=><, A;V4 >FV=8B8 =8@>2C DC=:FVN, 7>:@5<0 C E2>@8E 2V:>< 2V4 75 @>:V2, H;OE>< 287=0G5==O ;;V@5=AC :@50B8=V=C 70 D>@N >:@>DB0, 28:>@8AB>2CNG8 40=V >AB0==L>3> 28

;O E2>@8E G;>2VG>W AB0BV. ;;V@5=A :@50B8=V=C (140-2V:) E<0A0 BV;0/(0,814 E :@50B8=V= 2 A8@>20BFV :@>2V), 45 2V: 28@065=> 2 @>:0E, <0A0 2 :3, 0 :@50B8=V= 2 A8@>20BFV :@>2V 2 <>;L/;

;O 6V=>: FN D>@@53C20B8 H;OE>< <=>65==O @57C;LB0BC =0 0,85.

!:I> A8@>20B:>289 :@50B8=V= 28@065=> 2 <3/<;, ?>:07=8: A;V4 ?><=>68B8 =0 :>5DVVFT=B 8,8.

0AB>AC20==O ;V:C20;L=8E 4>7 E2>@8< 7 4V03=>AB>20=> BO6:>N =8@>2>N =54>AB0B=VABN (;V@5=A :@50B8=V=C 30<;/E2) ?@>B8?>:070=5 (482. @>74V; «@>B8?>:070==O»).

@83=VG5==O A5:@5FVW 0;L4>AB5@>=C. 5?0@8= <>65 ?@83=VGC20B8 A5:@5FVN 0;L4>AB5@>=C =04=8@:>28<8 70;>70<8, >A>1;82> C
?0FVT=BV2 7 FC:@>28< 4V015B<<, E@>=VG=>N =8@:>2>N =54>AB0B=VABN, C65 VA=CNG8< <5B01>;VG=8< 0F84>7<<, ?V428I5=8< @V2=5< :0;VN
C ?;072V, 0 B0:>6 C ?0FVT=BV2, O:V ?@89<0NBL ?@5?0@0B8 :0;VN. 878: 3V?5@:0;VT1>@>B=82V =5>1EV4=> 28 ?>G0B:C ;V:C20==O 35?0@8=< B0
@53C;O@=> :>=B@>;N20B8 C ?>40;LH>A>1;82> O:I> ;V:C20==O B@820T ?>=04 7 4=V2.

01>@0B>@=V ?>:07=8:8. >=VB>@8=3 :V;L:>ABV B@<1>F8BV2.
>=B@>;L @V2=O B@><1>F8BV2 V @878: 35?0@8=V=4C:>20=>W B@><1>F8B>?5=VW (=0?@8:;04, " B8?C). <>6CBL V=4C:C20B8 @>728B>: " II
B8?C A5@9>7=>W V>?>A5@54:>20=>W B@><1>F8B>?5=VW, O:0 <>65 A?@8G8=8B8 0@B5@V0;L=V 01> 25=>7=V B@><1>5<1>;VG=V ?>4VW, I>
<>6CBL 1CB8 =5157?5G=8<8 4;O 68BBO 01> ?>3V@HC20B8 DC=:FV>=0;L=89 ?@>3=>7 4;O ?0FVT=B0 (482. @>74V; <<>1VG=V @50:FVW)). ;O
A2>TG0A=>3> 28O2;5==O " 70 ?0FVT=B0<8 =5>1EV4=> 74V9A=N20B8 :>=B@>;L C B0:>@O4:C:

0FVT=B8, I> ?5@5=5A;8 >?5@0B82=5 2B@CG0==O 01> =5I>402=> >B@8<0;8 B@02BO3<< 3 2V4 B>3>, ?@87=0G0TB LAO ?@5?0@0B 4;O
;V:C20;L=>W 01> ?@>DV;0:B8G=>W B5@0?VW, 2 CAVE ?0FVT=BV2 =5>1EV4=5 A8AB5<0B8G=5 28:>=0==O ;01>@0B>@=8E 4>A;V465=L, >A:V;L:8
G0AB>B0 " AB0=>28BL > 0,1 % 01> =02VBL > 1 % C EV@C@3VW B0 B@02<0B>;>3VW. &V 4>A;V465==O <0NBL 2;;NG0B8 287=0G5==O 2<1>F8BV2:
- ?5@54 ?@87=0G5==O< 01> =5 ?V7=VH5 =V6 G5@57 24 3>48=8 ?VA;O ?>G0B:C B5@0?VW ?@5?0@0B<<;
- C ?>40;LH>BO3<< >4=>3> 4 <0:A8<0;L=>3> @878:C);

- C ?>40;LH> ;V:C20==O ?@>4>26CTBLAO, >48= @07 =0 B8645=L 4> 2V4
0FVT=B 7 V=H8<8 AB0=0<8, 2V4 2V4 B>3>, ?@87=0G0TB LAO ?@5?0@0B 4;O ;V:C20;L=>W 01> ?@>DV;0:B8G=>W B5@0?VW, =5>1EV4=5 A8AB5
<0B8G=5 28:>=0==O ;01>@0B>@=8E 4>A;V465=L 73V4=> V7 B8<8 6 ?@8=F8?0<8, I> 70AB>A>2CNBLAO 2 EV@C@3VW V B@02<0B>;>3VW (482.
28I5), C ?0FVT=BV2:

- O:V @0=VH5 >B@8=>20=89 35?0@8= (\$) 01> 2 >AB0==V 6 2CNG8, I> G0AB>B0 " AB0=>28BL > 0,1% 01> =02VBL > 1 %;
- O:V <0NBL 7=0GCIV AC?CB=V 70E2>@N20==O, 2@0E>2CNG8 ?>B5=FV9=C BO6:VABL " C B0:8E ?0FVT=BV2.
V=H8E 28?04:0E, 15@CG8 4> C2038 1V;LH =87L:C G0AB>BC @>728B:C " (< 0,1 %), :>=B@>;L 2<1>F8BV2 <>65 1CB8 >1<565=89 B0:8<8 70E>40<8:
- :>=B@>;L 2<1>F8BV2 =0 ?>G0B:C ;V:C20==O 01> =5 ?V7=VH5 =V6 G5@57 24 3>48=8 ?VA;O ?>G0B:C ;V:C20==O;
- :>=B@>;L 2<1>F8BV2 70 =002=>ABV ;;V=VG=>W A8<0B8:8, I> <>65 2:07C20B8 =0 " (1C4L-O:89 =>289 5?V7>4 0@B5@V0;L=>W B0/01> 25=>7=>W
B@><1>5<1>;VW, 1C4L-O:5 1>;VA=5 C@065==O H:V@8 2 <>6;82VABL 28=8:=5==O B0:8E A8?>B@51C ?>2V4<<;5==O ?@> =8E ;V:0@N.!:V4
70?V4>7@8B8 28=8:=5==O ", O:I> :V;L:VABL B@<1>F8BV2 =86G5 150 000/<<3 B0/01> O:I> <0 ?>A;V4>2=8<8 287=0G5==O<8 A?>AB5@V30TB LAO
7=865==O :V;L:>ABV B@<1>F8BV2 =0 30-50 %. 030;<<, " @>72820TB LAO G5@57 5-21 45=L ?VA;O ?>G0B:C ;V:C20==O 35?0@8=< (1V;LHVABL
28?04:V2 28=8:0T G5@57 10 4=V2).

4=0: C E2>@8E 7 35?0@8=V=4C:>20=>N B@><1>F8B>?5=VTN 2 0=0<=57V F5 CA:;04=5==O <>65 28=8:=CB8 =01030B> @0=VH5, ?@> :>:@52V4>
<;O;>AO G5@57 21 45=L. B65, A;V4 A8AB5<0B8G=> 28O2;OB8 E2>@8E 7 B0:8< 0=0<=57<<, ?@>2>4OG8 45B0;L=V A?V215AV48 7 E2>@8<8 ?5@54
>>G0B:<< ;V:C20==O.
@V< B>3>, @878: @5F8482C ?@8 2V4=>2;5==V ;V:C20==O 35?0@8=< <>65 715@V30B8AO ?@>BO3<< 45;V;L:>E @>:V2 01> =02VBL ?@>BO3<<
=5>1<565=>3> ?5@V>4C G0AC (482. @>74V; <<>B8?>:070==O)).

2AVE 28?04:0E " T:@8B8G=8< AB0=<< V ?>B@51CT :>=AC;LB0FVW A?5FV0;VAB0.
C4L-O:5 7=0G=5 7=865==O :V;L:>ABV B@<1>F8BV2 (30-50 % 2V4=>A=> ?>G0B:>2>3> @V2=O) T ?>?5@546C20;L=8< 7=0:<< =02VBL 4> B>3>, O:
F59 ?>:07=8: 4>AO3=5 :@8B8G=>3> @V2=O. # 2AVE 28?04:0E 7=865==O :V;L:>ABV B@<1>F8BV2 A;V4 268B8 =0ABC?>8E 70E>4V2:

- 1) B5@2> ?@>25AB8 :>=B@>;L :V;L:>ABV B@<1>F8BV2;
- 2) ?@8 ?V4B25@465==V 01> =02VBL ?@>3@5AC20==V B@><1>F8B>?5=VW ?@8 2V4ACB=>ABV V=H>W >G5284=>W ?@8G8=8 FL>3> O28I0
=5>1EV4=> 2V4<.

@07>: :@>2V 7018@0B8 2 ?@>1V@:C 7 F8B@0B< 4;O ?@>2545==O B5ABV2 =0 03@530FVN B@><1>F8BV2 in vitro B0 V;>3VG=8E B5ABV2. 4=0:
?@8 B0:8E AB0=0E B5@2V 70E>48 A;V4 ?@89<0B8 =5 =0 ?V4AB02V @57C;LB0BV2 B5ABV2 =0 03@530FVN B@><1>F8BV2 in vitro 01> V
>3VG=>3> 0=0;V7C, >A:V;L:8 B0:V 0=0;V78 A;V4 28:>=C20B8 C 728G09=>@O4:C ;8H5 2 45O:8E A?5FV0;V7>20=8E ;01>@0B>@VOE, 0
@57C;LB0B8 C :@0I>B>2V ;8H5 G5@57 45:V;L:0 3>48=. A5 6 FV 0=0;V78 T =5>1EV4=8<8 4;O 4V03=>AB8:8 CA::04=5=L, >A:V;L:8 ?@8
?@>4>265==V ;V:C20==O 35?0@8=< @878: @>728B:C B@><1>7C 4C65 28A>:89;
3) ?@>DV;0:B8:0 01> ;V:C20==O B@><1>B8G=8E CA::04=5=L, ?>2O70=8E 7 ".
/:I> VA=CT =5>1EV4=VABL ?@>4>26C20B8 0=B8:>03C;O=B=C B5@0?VN, 35?0@8= A;V4 70>1>B8G=8< 70A>1>< V=H>W 3@C?8, =0?@8::04,
40=0?0@>W4<< =0B@VN 01> 3V@C48=><<, O:V ?@87=0G0NBL C ;V:C20;L=8E 01> ?@>DV;0:B8G=8E 4>70E C :>6=>@5<<.
0@0;L=8< 0=B8:>03C;O=B<< <>6;820 BV;L:8 ?VA;O =>@<0;V70FVW :V;L:>ABV B@><1>F8BV2, >A:V;L:8 VA=CT 703@>70 @5F8482C B@><1>7C ?V4
2?;82<< ?5@>@0;L=8E 0=B8:>03C;O=BV2.
0@0;L=8<8 0=B8:>03C;O=B0<8. <5B>N <=>VB>@8=3C 5D5:BV2 ?5@>@0;L=8E 0=B8:>03C;O=BV2 A;V4 ?>A8;8B8 ;V=VG=89 =03;04 B0 ?V428I8B8
G0AB>BC ?@>2545==O ;01>@0B>@=8E 0=0;V7V2 (?@>B@><1V=>289 G0A, I> 28@065=89 O: 4=5 =>@<0;V7>20=5 A?V22V4=>H5==O (!).
A:V;L:8 4;O @>728B:C <0:A8<0;L=>3> 5D5:BC ?5@>@0;L=>3> 0=B8:>03C;O=BC ?>B@V15= 45O:89 G0A, B> =5>1EV4=> ?@>4>26C20B8
35?0@8=>B5@0?VN C ?>ABV9=V9 4>7V ?@>BO3<< G0AC, 4>AB0B=L>3> 4;O 715@565==O ?>:07=8:0 ! C 1060=>3> B5@0?52B8G=>3> ?>:070==O
V=B5@20;V <0 ?>A;V4>2=> 28:>=0=8<8 0=0;V70<8.
>=VB>@8=3 0=B8-%0 0:B82=>ABV. A:V;L:8 1V;LHVABL ;V=VG=8E 4>A;V465=L, O:V ?@>45=>=AB@C20;8 5D5:B82=VABL , 1C;8 ?@>2545=V V7
70AB>AC20==O< 4>78, @>7@0E>20=>W 28E>4OG8 7 <0A8 BV;0 E2>@>3>, 157 A?5FV0;L=>3> ;01>@0B>@=>3> :=B@>;N, =5>1EV4=VABL
?@>2545==O ;01>@0B>@=8E 0=0;V7V2 4;O 287=0G5==O 5D5:B82=>ABV ;V:C20==O =5 2AB0=>2;5=0. 4=0: C ?52=8E ;V=VG=8E A8BC0FVOE, O:V
G0AB> AC?@>2>46CNBLAO @878:< ?5@54>7C20==O, ;01>@0B>@=V 0=0;V78, 0 A0<5: <=>VB>@8=3 0=B8-%0 0:B82=>ABV, <>65 1CB8 :>@8A=8<
4;O ?>?5@5465==O @878:C 28=8:=5==O :@>2>B5GV.
"0:V A8BC0FVW ?5@5206=> AB>ACNBLAO ;V:C20;L=8E ?>:070=L 4> 70AB>AC20==O V ?>2O70=V 7 4>70<8, I> ?@87=0G0NBL E2>@8
- 7 ;53:8< B0 ?>N >:@>DB0). A:V;L:8 =0 2V43> =5D@0:FV9=>3> 35?0@8=C 282>48BLAO ?5@5206=> =8@:0<8, 1C4L-O:0 =8@:>20 =54>AB0B=VABL
<>65 AB0B8 ?@8G8=>N 28=8:=5==O 2V4=>A=>3> ?5@54>7C20==O. "O6:0 =8@:>20 =54>AB0B=VABL T ?@>B8?>:070==O< 4> 70AB>AC20==O 2
;V:C20;L=8E 4>70E (482. @>74V; «@>B8?>:070==O»);
- 7 =04728G09=> 25;8:>N 01> <0;>N <0A>N BV;0 (AEC4=5==O 01> =02VBL :0E5:AVO, >68@V==O);
- 7 :@>2>B5G5N =57OA>20=>W 5BV>;>3VW.
02?0:8, ?@>2545==O ;01>@0B>@=>3> <=>VB>@8=3C =5 @5:><5=4CTBLAO C 28?04:C 70AB>AC20==O ?@>DV;0:B8G=8E 4>7, O:I> ;V:C20==O
?@>2>48B8 2V4?>2V4=> 4> B5@0?52B8G=8E @5:><5=40FV9 (7>:@5<0 I>4> B@820;>ABV ;V:C20==O), 0 B0:>6 ?V4 G0A 35<>4V0;V7C.
;O 28O2;5==O <>6;82>W :C2B>@=>3> 22545==O @5:><5=4CTBLAO ?@8 =5>1EV4=>ABV 1@0B8 :@>2 =0 0=0;V7 =0 ?V:C 0:B82=>ABV (73V4=> 7
=0O2=8<8 40=8<8), B>1B> G5@57 4 3>48=8 ?VA;O B@5BL>W V=T:FVW ?@8 ?V4H:V@=>1C.
5>1EV4=VABL ?@>2545==O ?>2B>@=8E 0=0;V7V2 0=B8-%0 0:B82=>ABV 4;O 287=0G5==O @V2=O 35?0@8=C 2 :@>2V, =0?@8::04, G5@57 :>6=V 2-3
4=V, 28@VHCTBLAO 2 V=482V4C0;L=>@O4:C 70;56=> 2V4 @57C;LB0BV2 ?>?5@54=L>3> 0=0;V7C. "0:>6 <>65 1CB8 =5>1EV4=> 2V4:>@83C20B8
4>78 .
87=0G5=0 0=B8-%0 0:B82=VABL 72V4 >:@5<>3> B0 >:@5<>3> @5687C20==O.
> 2V4><0: 28E>4OG8 7 =0O2=8E 40=8E, A5@54=V9 ?>:07=8: (± AB0=40@B=5 2V4E8;5==O), O:89 A?>AB5@V302AO G5@57 4 3>48=8 ?VA;O AL<>W
V=T:FVW 5=>:A0?0@8=C, I> 22>482AO C 4>7V 100 0=B8-%0 /:3/V=T:FVN 2 @078 =0 4>1C, AB0=>282 1,20±0,17 0=B8-%0 K;.
&59 A5@54=V9 ?>:07=8: A?>AB5@V302AO ?V4 G0A ;V=VG=8E 4>A;V465=L, C O:8E :V;L:VA=5 287=0G5==O 0=B8-%0 0:B82=>ABV ?@>2>48;8 E@>
<>35==8< (0;VB8G=8<) <5B>4>

:B82>20=89 G0AB:>289 B@><1>?;0AB8=>289 G0A (""). 5O:V A?@8G8=ONBL ?>3> 5D5:BC =5 7OA>20=5, =5<0T =5>1EV4=>ABV 28:>@8AB>2C20B8 F59 B5AB 4;O <=>VB>@8=3C ;V:C20==O.

!/?V=0;L=0/5?V4C@0;L=0 0=5AB57VO C E2>@8E, O:V >B@8DV;0:B8G=5 ;V:C20==O.

/: V C 28?04:C 7 V=H8<8 0=B8:>03C;O=B0<8, 1C;8 70@5TAB@>20=V ?>>48=>:V 28?04:8 A?V=0;L=8E 35<0B>< ?@8 70AB>AC20==V ?V4 G0A ?@>2545==O A?V=0;L=>W/5?V4C@0;L=>W 0=5AB57VW, I> A?@8G8=O;8 B@820;89 01> ?>ABV9=89 ?0@0;VG.

878: @>728B:C A?V=0;L=>W 35<0B><8 28I89 C 28?04:C 5?V4C@0;L=>W 0=5AB57VW, O:0 ?@>2>48BLAO V7 70AB>AC20==O< :0B5B5@0, =V6 C 28?04:C A?V=0;L=>W 0=5AB57VW.

878: 28=8:=5==O B0:8E ?>>48=>:8E 28?04:V2 <>65 7@>AB0B8 ?@8 B@820;>@8AB0==V 5?V4C@0;L=8E :0B5B5@V2 C ?VA;O>?5@0FV9=89 ?5@V>4. >;8 ;V:0@ ?@8<0T @VH5==O ?@> ?@87=0G5==O 0=B8:>03C;O=V2 =0 B;V ?@>2545==O 5?V4C@0;L=>W/A?V=0;L=>W 0=5AB57VW, =5>1EV4=0 =04728G09=0 ?8;L=VABL B0 ?>ABV9=89 :=>B@>;L 4;O 28O2;5==O 1C4L-O:8E A8>3VG=8E ?>@CH5=L, B0:8E O: 1V;L ?> A5@548==V9 ;V=VW A?8=8, ?>@CH5==O GCB;828E B0 @CE>28E DC=:FV9 (=V A;01:VABL =86=VE :V=FV2>.), 48ADC=:FVO :8H5G=8:C B0/01> A5G>2>3>1EV4=> ?>?5@548B8 ?@> =5>1EV4=VABL =5309=> ?>2V4<;OB8 A2>T 28=8:=5==O C =8E 1C4L-O:8E 7 28I5=0720=8E A8 ?V4>7@NTBLAO A?V=0;L=0 35<0B><0, =5>1EV4=> @>7?>G0B8 =52V4::04=V 4V03=>AB8G=V B0 ;V:C20;L=V 70E>48, C B>3> <>7:C.

/:I> C ?5@54>?5@0FV9=>4V ?>B@V1=5 ;V:C20==O (C E2>@8E, O:V B@820;89 G0A 7=0E>4OBLAO =0 ?>ABV;L=>W/@53V=>0;L=>W A?V=0;L=>W 0=5AB57VW @5B5;L=> 72065=0, B> E2>@8<, O:V >B@8<0;8 V=T:FVN C ?5@54>?5@0FV9=>4V, <>6=0 ?@>2>48B8 0=5AB57VN 70 C<>28, I> 5;><5=4CTBLAO ?@>2>48B8 @5B5;L=5 =52@>;>3VG=5 A?>AB5@565==O G5@57 =5157?5:C 28=8:=5==O A?V=0;L=>W 35<0B><8.

0965 2 CAVE E2>@8E G5@57 6-8 3>48= ?VA;O 0=5AB57VW 01> ?VA;O 2840;5==O :0B5B5@0<>6=0 @>7?>G8=0B8 ?@>DV;0:B8G=5 ;V:C20==O ?@8 ?@>2545==V =52@>;>3VG=>3> A?>AB5@565==O.

!;V4 1CB8 >A>1;82> >15@56=8<8 ?@8 70AB>AC20==V ?@5?0@0BC >4=>G0A=> 7 V=H8<8 ;V:0@AL:8<8 70A>10<8, O:V 2?;820NBL =0 35<>AB07 (>A>1;82> =5AB5@>W4=8<8 ?@>B870?0;L=8<8 70A>10<8, 0A?V@8=><).

!B0=8, I> AC?@>2>46CNBLAO >A>1;828< @878:> !?>AB5@565==O 70 E>4<< ;V:C20==O A;V4 ?>A8;8B8 C =0ABC?=8E 28?04:0E:

- ?5GV=:>20 =54>AB0B=VABL;
- =0O2=VABL 2 0=0<=57V 28@07:8 30AB@>4C>45=0;L=>W 7>=8 01> V=H8E >@30=VG=8E C@065=L, O:V 7C<>2;NNBL :@>2>B5GV;
- AC48==5 E>@V>@5B8=0;L=5 70E2>@N20==O;
- ?VA;O>?5@0FV9=89 ?5@V>4 ?VA;O EV@C@3VG=>3> 2B@CG0==O =0 3>;>2=>A?8==>
- ;N<10;L=0 ?C=:FVO: A;V4 2@0E>2C20B8 @878: V=B@0A?V=0;L=>W :@>2>B5GV V, ?><>6;82>ABV, 2V4::040B8 WW ?@>2545==O =0 O:=094>2H89 G0A;
- >4=>G0A=5 70AB>AC20==O 7 ;V:0@AL:8<8 70A>10<8, I> 2?;820NBL =0 35<>AB07 (482. @>74V; «□70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»).

%>G0 :=F5=B@0FVW @V7=8E =87L:><>;5:C;O@=8E 35?0@8=V2 287=0G0NBLAO C 4=8E >48=8FOE () 0=B8-%0 0:B82=>ABV, WE 5D5:B82=VABL 287=0G0TBLAO =5 ;8H5 WE 0=B8-%0 0:B82=VABN. 5157?5G=> 7048= @568< 4>7C20==O =0 V=H89, >A:V;L:8 :=65= @568< 1C;> >1'@C=B>20=> A?5FV0;L=8<8 ;V=VG=8<8 4>A;V465==O<8. B65, ?@8 70AB>AC20==V :>6=>3> ?@5?0@0BC A;V4 4>B@8A>1;82>W >15@56=>ABV B0 28:>=C20B8 A?5FV0;L=V V=AB@C:FVW I>4> 9>3> 70AB>AC20==O.

878: :@>2>B5GV. 5>1EV4=> 4>B@8<5=4>20=8E @5687C20==O (4>7C20==O B0 B@820;VABL ;V:C20==O). 528:>=0==O F8E @5:>5=40FV9 <>65 A?@8G8=8B8 @>728B: :@>2>B5GV, 7>:@5<0 C E2>@8E, O:V =0;560BL 4> 3@C?8 ?V428I5=>3> @878:C (E2>@V ;VB=L>3> 2V:C, 7 ?>@CH5==O< DC=:FVW =8@>:).

8?04:8 BO6:8E :@>2>B5G A?>AB5@V30;8AO C B0:8E A8BC0FVOE:

- C E2>@8E ;VB=L>3> 2V:C, 7>:@5<0 G5@57 7=865==O DC=:FVW =8@>;, I> 28=8:0T 7 2V:><;

- C E2>@8E 7 ?>@CH5==O< DC=:FVW =8@>;
- ?@8 <0AV BV;0<5=H5 40 :3;
- ?@8 ;V:C20==V, B@820;VABL O:>3> ?5@528ICT @5:×5=4>20=C A5@54=N B@820;VABL 2 10 4=V2;
- ?@8 =528:>=0==V B5@0?52B8G=8E @5:><5=40FV9 (7>:@5<0 B8E, I> AB>ACNBLAO B@820;>ABV ;V:C20==O B0 :>@5:FVW 4>78 2V4?>2V4=> 4>
<0A8 BV;0 ?V4 G0A ;V:C20==O);
- ?@8 >4=>G0A=>AC20==V 7 ?@5?0@0B0<8, O:V ?V428ICNBL @878: 28=8:=5==O :@>2>B5GV (482. @>74V;«□70T<>4VO 7 V=H8<8 ;V:0@AL:8<8
70A>10<8 B0 V=HV 2848 270T<>4V9»).

=T:FVW 5=>:A0?0@8=C, O: V 1C4L-O:>3> V=H>3> 0=B8:>03C;O=BC, =5>1EV4=> 70AB>A>2C20B8 7 >15@56=VABN ?@8 AB0=0E, 4;O O:8E 2;0AB820
?V428I5=0 V<>2V@=VABL 28=8:=5==O :@>2>B5G, B0:8E O: ?>@CH5==O 35<>AB07C, =0O2=VABL ?5?B8G=>W 28@07:8 2 0=0<=57V, =5I>402=>
?5@5=5A5=89 VH5=B@>;L>20=0 0@B5@V0;L=0 3V?5@B5=7VO, 4V015B8G=0 @5B8=>?0BVO, =5I>402=> ?5@5=5A5=5 =59@>EV@C@3VG=5 01>
>DB0;L<>;>3VG=5 EV@C@3VG=5 2B@CG0==O.

1C4L O:>@V ;VB=L>3> 2V:C B0/01> E2>@V 7 ?>@CH5==O< DC=:FVW =8@>;, 0 B0:>6 E2>@V, ;V:C20==O O:8E B@820T 1V;LH5 10 4=V2, ?>28==V
7=0E>48B8AL ?V4 >A>1;828< <548G=8< =03;O4>

?52=8E 28?04:0E :V;L:VA=5 287=0G5==O 0=B8-%0 0:B82=>ABV<>65 1CB8 :>@8A=8< 4;O 28O2;5==O :C
878: 35?0@8=-V=4C:>20=>W B@><1>F8B?>5=VW ("). @8 @>728B:C B@><1>B8G=8E CA;;04=5=L C E2>@>3>, O:89 >B@8 ?@>DV;0:B8G=8E
4>70E), 0 A0<5:

- 703>AB@5==O B@><1>7C, ;V:C20==O O:>3> ?@>2>48BLAO;
- D;51VB;
- B@><1>5<1>;VO ;535=52>W 0@B5@VW;
- 3>AB@0 VH5;;
- V=D0@:B :0@40 01> VH5 - 702648 A;V4 ?@8?CA:0B8 <>6;8289 @>728B>: " B0 B5@2> 287=0G0B8 :V;L:VABL B@><1>F8BV2 (482. @>74V;
«A>1;82>ABV 70AB>AC20==O»).

@>F54C@8 @520A:C;O@870FVW :>@>=0@=8E 0@B5@V9. ;O >1<565==O @878:C @>728B:C :@>2>B5GV C ?0FVT=BV2, O:8< ?@>2>48BLAO
0=3V>?;0AB8:0 :>@>=0@=8E 0@B5@V9 7 <5B>N ;V:C20==O =5AB01V;L=>W AB5=>:0@4VW, V=D0@:BC:0@40 157 7C1FO Q 01> 3>AB@>3>
V=D0@:BC :0@40 7 ?V49><> A53<5=B0 ST, A;V4 B>G=> 4>B@8<5=4>20=8E ?@>1EV4=> 2840;8B8 G5@57 6 3>48= ?VA;O >AB0==L>3>
?V4H:V@=>3>/2=CB@VH=L>25==>3> 22545==O 5=>:A0?0@8=C. @8 ?@>4>265==V ;V:C20==O V7 70AB>AC20==O< 5=>:A0?0@8=C =0ABC?=C
V=T:FVN A;V4 @>18B8 =5 @0=VH5 =V6 G5@57 6-8 3>48= ?VA;O 2840;5==O ?@>2V4=8:0. 5>1EV4=> A?>AB5@V30B8 70
(BCG=V <5E0=VG=V.:0?0=8 A5@FO. 0AB>AC20==O 5=>:A0?0@8=C 4;O ?>?5@5465==O B@><1>5<1>;VG=8E CA;;04=5=L C ?0FVT=BV2 7V
HBCG=8<8 <5E0=VG=8<8 ;;0?0=0<8 A5@FO C A?5FV0;L=8E 4>A;V465==OE =5 282G0;>AO. 4=0: 1C;> 70@5TAB@>20=> 45:V;L:0 ?>>48=>:8E
28?04:V2 B@><1>7C C ?0FVT=BV2 7V HBCG=8<8 <5E0=VG=8<8 ;;0?0=0<8 A5@FO, O:V >B@8:A0?0@8= 4;O ?>?5@5465==O B@><1>5<1>;VG=8E
CA;;04=5=L.

03VB=V 6V=:8. V4 G0A ;;V=VG=>3> 4>A;V465==O A5@54 203VB=8E 6V=>: V7 HBCG=8<8 <5E0=VG=8<8 ;;0?0=0<8 A5@FO, O:V >B@8:A0?0@8=C 2
@078 =0 4>1C 7 <5B>N 7<5=H5==O @878:C B@><1>5<1>;VG=8E CA;;04=5=L, C 2 7 8 6V=>: @>728=C2AO B@><1>7, O:89 ?@872V2 4> B0=048 ;;0?0=0
B0 ;5B0;L=>3> =0A;V4:C <0B5@V B0 ?>;40. @V< FL>3>, ?>>48=>:V 28?04:8 B@><1>7C C 203VB=8E 6V=>: 7V HBCG=8<8 <5E0=VG=8<8 ;;0?0=0<8
A5@FO, O:V >B@8:A0?0@8= 4;O 7<5=H5==O @878:C B@><1>5<1>;VG=8E CA;;04=5=L, 1C;8 70@5TAB@>20=V V ?V4 G0A ?@>2545==O ?>AB
<0@:5B8=3>2>3> A?>AB5@565==O 70 ?@5?0@0B@><1>5<1>;VG=8E CA;;04=5=L C F8E ?0FVT=B>: <>65 1CB8 28I8
548:0<5=B>7=0 ?@>DV;0:B8:0.

28?04:C 3>AB@>3> 5?V7>4C V=D5:FV9=>3> 01> @52<0B8G=>3> 70E2>@N20==O ?@>DV;0:B8G=0 B5@0?VO 28?@0240=0 ;8H5 70 C<>28
=0O2=>ABV B0:>6 E>G0 1 >4=>3> 7 =0ABC?=8E D0:B>@V2 @878:C @>728B:C 25=>7=>W B@<1>5<1>;VW:

- 2V: AB0@H5 75 @>:V2,

- >=:>;>3VG=5 70E2>@N20==O,

- 25=>7=0 B@<1>5<1>;VO 2 0=0<=57V,

- >68@V==O,

- B5@0?VO 7 70AB>AC20==O< 3>@<>=V2,

- A5@F520 =54>AB0B=VABL,

- E@>=VG=0 48E0;L=0 =54>AB0B=VABL.

>A2V4 70AB>AC20==O FL>3> ?@5?0@0BC 7 <5B>N <548:0<5=B>7=>W ?@>DV;0:B8:8 C ?0FVT=BV2 2V:< AB0@H5 80 @>:V2 7 <0A>N BV;0 <5=H5
40 :3 =0@07V 4C65 >1<565=89.

@>2>B5GV C ;N459 ;VB=L>3> 2V:C # ;N459 ;VB=L>3> 2V:C =5 ?>?V428I5=>W B5=45=FVW 4> :@>2>B5G C <560E ?@>DV;0:B8G=>3> 4V0?07>=C
4>7. 0FVT=B8 ;VB=L>3> 2V:C (>A>1;82> ?0FVT=B8 2V:< 2V4 80 @>:V2) <0NBL ?V428I5=89 @878: CA:;04=5=L, ?>2O70=8E V7 :@>2>B5G0<8, C
B5@0?52B8G=>=V 4>7. @8 ;V:C20==V 3>AB@>3> V=D0@:BC :0@40 7 5;520FVTN A53<5=B0 ST (STEMI) 71V;LH5==O :V;L:>ABV :@>2>B5G
2V47=0G0;>AO C ?0FVT=BV2 2V:< 2V4 65 4> 75 @>:V2, 2:07CNG8 =0 B5, I> FV ?0FVT=B8 <0NBL ?>B@0?;OB8 ?V428I5=89 @878: :@>2>B5G. 5:>
<5=4CTBLAO @5B5;L=89 ;V=VG=89 <=>VB>@8=3 (482. @>74V;8 «!>AV1 70AB>AC20==O B0 4>78» B0 «\$0@<0:>:V=5B8:0»).

>@CH5==O DC=:FVW =8@>.: 0FVT=B8 7 ?>@CH5==O< DC=:FVW =8@>: ?V4?040NBL ?V4 71V;LH5=89 2?;82 5=>:A0?0@8=C, I> ?V428ICT @878:
:@>2>B5G. A:V;L:8 2?;82 5=>:A0?0@8=C ACBBT2> ?V428ICTBLAO C ?0FVT=BV2 7 BO6:>N =8@>:2>N =54>AB0B=VABN (;V@5=A :@50B8=V=C <30
<:/E2), B> @5:<5=4CTBLAO :>@5:FVO 4>78 C B5@0?52B8G=>DV;0:B8G=>=V 4>7. %>G0 =5<0T @5:<5=40FV9 AB>A>2=> :>@5:FVW 4>78 4;O
?0FVT=BV2 7 ?>@CH5==O< DC=:FVW =8@>: A5@54=L>3> (;V@5=A :@50B8=V=C 30-50<:/E2) B0 ;53:>3> ABC?5=O (;V@5=A :@50B8=V=C 50-80<;
/E2), @5:<5=4CTBLAO 74V9A=N20B8 @5B5;L=89 ;V=VG=89 <=>VB>@8=3 (482. @>74V;8 «!>AV1 70AB>AC20==O B0 4>78» B0 «\$0@
<0:>:V=5B8:0»).

0=V I>4> ;V:C20==O 3>AB@>3> V=D0@:BC :0@40 7 5;520FVTN A53<5=BC ST (STEMI) C ?0FVT=BV2 7 @V2=O<8 :@50B8=V=C 28I5 220 B0 175
87L:0 <0A0 BV;0 # 6V=>: 7 =87L:>N <0A>N BV;0 (<45 :3) B0 G>;>2V:V2 7 =87L:>N <0A>N BV;0 (<57 :3) 2V47=0G02AO 71V;LH5=89 2?;82

5=>:A0?0@8=C 2 ?@>DV;0:B8G=>=V 4>7 (=5 :>@83C20;8AO 2V4?>2V4=> 4> <0A8 BV;0), I> G0AB8H5 ?@872>48BL 4> 28=8:=5==O :@>2>B5G. "0:8<
G8=><, @5:<5=4CTBLAO 74V9A=N20B8 @5B5;L=89 ;V=VG=89 <=>VB>@8=3 AB0=C F8E ?0FVT=BV2 (482. @>74V; «\$0@<0:>:V=5B8:0»).

>=VB>@8=3. FV=:0 @878:C B0 ;V=VG=89 <=>VB>@8=3 =5>1EV4=V 4;O ?@>3=>7C20==O ?>B5=FV9=8E :@>2>B5G. 0728G09 =5<0T
=5>1EV4=>ABV C 728G09=>6 <0NBL ?V428I5=89 @878: :@>2>B5G (=0?@8:;04, 4;O ?0FVT=BV2 7 ?>@CH5==O< DC=:FVW =8@>:, ?0FVT=BV2
;VB=L>3> 2V:C B0 ?0FVT=BV2 7 <56>28<8 7=0G5==O<8 <0A8 BV;0) 01> 0:B82=V :@>2>B5GV.

01>@0B>@=V 0=0;V78. # 4>70E, I> 70AB>A>2CNBL 4;O ?@>DV;0:B8:8 25=>7=>W B@<1>5<1>;VW, 5=>:A0?0@8= =0B@VN =5 2?;8202 ACBBT2>
=V =0 G0A :@>2>B5GV B0 7030;L=V 0=0;V78 73>@B0==O :@>2V, =V =0 03@530FVN B@<1>F8BV2 01> 7207C20==O DV1@8=>35=C 7 B@<1>F8B0
<8. @8 28I8E 4>70E <>65 71V;LHC20B8AO "" (0:B82>20=89 G0AB:>289 B@<1>?;0AB8=>289 G0A) B0 '(0:B82>20=89 G0A 73>@B0==O). 1V;LH5==O ""
B0 '=5 :>@5;NT ;V=V9=> 7V 71V;LH5=>N 0=B8B@<1>B8G=>N 0:B82=VABN 5=>:A0?0@8=C =0B@VN V, B0:8< G8=><, =5 T ?V4E>4OI8< V
4>AB>2V@=8< 4;O <=>VB>@8=3C 0:B82=>ABV 5=>:A0?0@8=C =0B@VN.

0AB>AC20==O C ?5@V>4 203VB=>ABV 01> 3>4C20==O 3@C44N.

03VB=VABL. 0O2=8E ;V=VG=8E 40=8E =54>AB0B=L> 4;O B>3>, I>1 28O28B8 <>6;82C 740B=VABL 5=>:A0?0@8=C A?@8G8=OB8 2048 @>728B:C 01>
G8=8B8 D5B>B>:A8G=89 2?;82 ?@8 9>3> 22545==V C ;V:C20;L=8E 4>70E C ?5@V>4 203VB=>ABV.

">A>2C20B8 ;V:C20;L=V 4>78 5=>:A0?0@8=C O: 70?>1V6=89 70EV4 C ?5@V>4 203VB=>ABV =5 @5:<5=4CTBLAO.

6>4=>

>4C20==O 3@C44N. A:V;L:8 30AB@>V=B5AB8=0;L=0 01A>@1FVO C =>2>=0@>465=8E T <0;>9<>2V@=>N, 6V=:0<, O:V 3>4CNBL 3@C44N,
;V:C20==O 5=>:A0?0@8=<=5 ?@>B8?>:070=5.

40B=VABL 2?;820B8 =0 H284:VABL @50:FVW ?@8 :5@C20==V 02B>B@0=A?>@B< 01> V=H8<8 <5E0=V7<0<8.

@89>< ?@5?0@0BC =5 2?;820T =0 740B=VABL :5@C20B8 02B>B@0=A?>@B=8< 70A>1>< B0 ?@0FN20B8 7 <5E0=V7<0<8. @>B5 A;V4 1CB8
>15@56=8<8 7 >3;O4C =0 <>6;82V ?>1VG=V @50:FVW (482. @>74V; <<>1VG=V @50:FVW»).

!?!>AV1 70AB>AC20==O B0 4>78.

(;OE 22545==O ?V4H:V@=89 (70 28=OB:>< ?0FVT=BV2 7 V=D0@:B< :0@40 7 5;520FVTN A53<5=B0 ST, O:8< =5>1EV4=5 2=CB@VH=L>25==5
1>;NA=5 22545==O).

5:><5=4>20=89 4;O 70AB>AC20==O 4>@>A;8

@5?0@0B =5 <>6=0 22>48B8 2=CB@VH=L><□O7>2>.

1 <; @>7G8=C 4;O V=T:FV9 5:2V20;5=B=89 ?@81;87=> 10000 0=B8-%0 5=>:A0?0@8=C.

"5E=V:0 ?V4H:V@=>3> 22545==O. >7C 5=>:A0?0@8=C A;V4 2V4:>@83C20B8 70;56=> 2V4 <0A8 BV;0 ?0FVT=B0. 5@54 ?@>2545==O< V=T:FVW
=5>1EV4=> 2840;8B8 709289 >1T< ?@5?0@0BC. /:I> 7092>3> >1T

=>:A0?0@8= A;V4 22>48B8 V=T:FV9=8< H;OE<< C ?V4H:V@=V B:0=8=8. 060=>, I>1 ?V4 G0A V=T:FVW ?0FVT=B 7=0E>482AO C ?>;>65==V ;560G8
=0 A?8=V. VAFO 22545==O ?@5?0@0BC A;V4 G5@3C20B8, ?@>2>4OG8 V=T:FVW B> C ;V2C, B> C ?@02C ?5@54=L>;0B5@0;L=C G8
704=L>;0B5@0;L=C 4V;O=:C G5@52=>W ABV=:8.

>;:C A;V4 22>48B8 =0 2AN 4>268=C C A;:04:C H:V@8, 7V1@0=C

:O 2=CB@VH=L>25==>3> (1>;NA=>3>) 22545==O ?@8 ;V:C20==V 3>AB@>3> V=D0@:BC :0@40 7 ?V49><< A53<5=B0 ST 70AB>A>2C20B8

1030B>4>7>289 D;0:>= ?@5?0@0BC ;5:A0=® 30 000 0=B8-%0 /3 <.: V:C20==O ?>G8=0B8 7 2=CB@VH=L>25==>W 1>;NA=>W V=T:FVW, A;V4< 70
O:>N =5309=> ?@>2>48B8 ?V4H:V@=C V=T:FVN. 030B>4>7>289 D;0:>= A;V4 70AB>A>2C20B8 4;O B>3>, I>1 <>6=0 1C;> =01@0B8 ?>G0B:>2C 4>7C
3000 , B>1B> 0,3 <; 70 4>?><>3>N 3@04C9>20=>3> 1 <; V=AC;V=>2>3> H?@8F0. &N 4>7C 5=>:A0?0@8=C 22>48B8 C B@C1:C A8AB5<8 4;O
2=CB@VH=L>25==>3> 22545==O @>7G8=V2. 5 4>?CA:0TBLAO 7 >4=>G0A=> 22>48B8 ?@5?0@0B 7 V=H8<8 ;V:0@AL:8<8 70A>10<8. ;O 2840;5==O
70;8H:V2 V=H8E ;V:0@AL:8E 70A>1V2, 0 >B65, V ?>?5@5465==O WE 7:A0?0@8=>< ?5@54 ?@>2545==O< 2=CB@VH=L>25==>3> 1>;NA=>3>
2545==O 5=>:A0?0@8=C B0 ?VA;O =L>3> :@0?5;L=8FN =5>1EV4=> ?@<<8B8 4>AB0B=L>N :V;L:VABN 0,9 % @>7G8=C =0B@VN E;>@84C 01>
@>7G8=C 3;N:>78. =>:A0?0@8= <>6=0 157?5G=> 22>48B8 C 0,9 % @>7G8=V =0B@VN E;>@84C 01> C 5 % @>7G8=V 3;N:>78.

C<>20E AB0FV=>0@C 1030B>4>7>289 D;0:>= <>6=0 70AB>A>2C20B8 4;O:

- >B@8<0==O 4>78 100 /:3 4;O ?5@H>W ?V4H:V@=>W V='T:FVW, O:C =5>1EV4=> ?@>25AB8 A;V4< 70 2=CB@VH=L>25==>N 1>;NA=>N
V=T:FVTN, 0 B0:>6 ?>40;LH8E 4>7 100 /:3, O:V =5>1EV4=> 22>48B8 ?V4H:V@=> :>6=V 12 3>48=;

- >B@8<0==O 4>78 30 /:3 4;O 2=CB@VH=L>25==>3> 1>;NA=>3> 22545==O E2>@8<, O:8< ?@>2>48BLAO ?>40;LH0 :>@>=0@=0 0=3V?>;0AB8:0.
030;L=V @5:><5=40FVW. #?@>4>26 CAL>3> ?5@V>4C ;V:C20==O A;V4 @53C;O@=> :>=B@>;N20B8 :V;L:VABL B@<1>F8BV2, >A:V;L:8 VA=CT
@878: 28=8=:5==O 35?0@8=-V=4C:>20=>W B@<1>F8B>?5=VW (") (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

V:C20==O 4V03=>AB>20=>3> B@<1>7C 3;81>:8E 25= ("), O:89 AC?@>2>46CTBLAO 01> =5 AC?@>2>46CTBLAO B@<1>5<1>;VTN ;535=52>W
0@B5@VW, ?@8 2V4ACB=>ABV B06:8E ;:V=VG=8E A8

@8 1C4L-O:V9 ?V4>7@V =0 B@<1>7 3;81>:8E 25= F59 4V03=>7 A;V4 H284:> ?V4B25@48B8 H;OE<< ?@>2545==O 2V4?>2V4=8E >1AB565=L.

!E5<0 22545==O. 2>48B8 2 V=T:FVW =0 4>1C 7 V=B5@20;< C 12 3>48=.

>70: 4>70 4;O 1 V=T:FVW AB0=>28BL 100 0=B8-%0 /:3.

>7C20==O 4;O E2>@8E 7 <0A>N BV;0 1V;LH5 100 :3 01> <5=H5 40 :3 =5 282G0;8. # E2>@8E 7 <0A>N BV;0 1V;LH5 100 :3 5D5:B82=VABL B5@0?VW

<>65 1CB8 45I> =86G>N, 0 C E2>@8E 7 <0A>N BV;0 <5=H5 40 :3 <>65 VA=C20B8 ?V428I5=89 @878: :@>2>B5GV. "0:V E2>@V ?>28==V 7=0E>48B8AL

?V4 >A>1;828< ;;V=VG=8< A?>AB5@565==O

"@820;VABL ;V:C20==O " @8 ;V:C20==V =87L:<>;5:C;O@=8< 35?0@8=<> A;V4 O:<>30 @0=VH5 ?5@5E>48B8 =0 B5@0?VN ?5@>@0;L=8<8

0=B8:>03C;O=B0<8, O:I> =5 VA=CT ?@>B8?>:070=L 4;O FL>3>. "@820;VABL ;V:C20==O =5 ?>28==O ?5@528IC20B8 10 4=V2, 7 C@0EC20==G G0AC,

=5>1EV4=>3> 4;O 4>AO3=5==O =5>1EV4=>3> B5@0?52B8G=>3> 5D5:BC 2V4 ?5@>@0;L=>3> 0=B8:>03C;O=BC, 70 28=OB:<> 28?04:V2, :>;8 FL>3>

5D5:BC 206:> 4>AO3B8. B65, ;V:C20==O ?5@>@0;L=8<8 0=B8:>03C;O=B0<8 A;V4 @>7?>G8=0B8 O:<>30 @0=VH5.

V:C20==O =5AB01V;L=>W AB5=>:0@4VW B0 3>AB@>3> V=D0@:BC:0@40 157 7CIFO Q. =>:A0?0@8= ?@87=0G0B8 C 4>7V 100 0=B8-%0 /:3, O:C

22>48B8 ?V4H:V@=> 2 @078 =0 4>1C G5@57 :>6=V 12 3>48=, C :<1V=0FVW 7 0F5B8;A0;VF8;>2>N :8A;>B>N (@5:<>5=4>20=0 4>70: 75-325 <3

2=CB@VH=L> ?VA;O

5:<>5=4>20=0 B@820;VABL ;V:C20==O AB0=>28BL 2-8 4=V2 (4> AB01V;V70FVW ;;V=VG=>3> AB0=C E2>@>3>).

V:C20==O 3>AB@>3> V=D0@:BC:0@40 7 ?V49><>< A53<5=B0 ST C :><1V=0FVW 7 B@><1>;VB8G=8< 70A>1><< C E2>@8E, C O:8E

?@>2>48BLAO ?>40;LH0 :>@>=0@=0 0=3V>?;0AB8:0, 0 B0:>6 C E2>@8E, O:8< FO ?@>F54C@0 =5 ?@>2>48BLAO. >G0B:>2C

2=CB@VH=L>25==C 1>;NA=C V=T:FVN 22>48B8 C 4>7V 3000 0=B8-%0 . !;V4< 70 =5N ?V4H:V@=> 22>4OBL 100 0=B8-%0 /:3 ?@>BO3<< 15 E28;8=,

?>BV< :>6=V 12 3>48= (4;O ?5@H8E 42>E ?V4H:V@=8E V=T:FV9 <0:A8<0;L=0 AC<0@=0 4>70 AB0=>28BL 10000 0=B8-%0).

5@HC 4>7C 5=>:A0?0@8=C A;V4 22>48B8 C 1C4L-O:89 G0A 70 15 E28;8= 4> 01> G5@57 30 E28;8= ?VA;O ?>G0B:C B@<1>;VB8G=>W

B5@0?VW (DV1@8=A?5F8DVG=>W 01> =V).

5:<>5=4>20=0 B@820;VABL ;V:C20==O AB0=>28BL 8 4=V2 01> 4>:8 ?0FVT=B0 =5 28?8HCBL 7V AB0FV=>0@C, O:I> 3>A?VB0;V70FVO B@820T

<5=H5 8 4=V2.

!C?CB=O B5@0?VO: ?VA;O ?>O28 A8G8=0B8 ?@89<< 0F5B8;A0;VF8;>2>W :8A;>B8 V ?@>4>26C20B8 C 4>7V 75-325 <3 =0 4>1C ?@>BO3<< =5 <5=H5

30 4=V2, O:I> =5 ?>:070=5 V=H5.

%2>@V, O:8< ?@>2>48BLAO :>@>=0@=0 0=3V>?;0AB8:0:

- O:I> 7 G0AC >AB0==L>3> ?V4H:V@=>3> 22545==O 5=>:A0?0@8=C 4> @>74C20==O 10;>=0 ?@>9H;> <5=H5 8 3>48=, 4>40B:>25 22545==O

5=>:A0?0@8=C =5 ?>B@V1=5;

- O:I> 7 G0AC >AB0==L>3> ?V4H:V@=>3> 22545==O 5=>:A0?0@8=C 4> @>74C20==O 10;>=0 ?@>9H;> 1V;LH5 8 3>48=, =5>1EV4=> ?@>25AB8

2=CB@VH=L>25==C 1>;NA=C V=T:FVN 30 0=B8-%0 /:3 5=>:A0?0@8=C. ;O 70157?5G5==O B>G=>ABV >1T 22>4OBL V=T:FV9=>, @5:>

<5=4CTBLAO @>725AB8 ?@5?0@0B 4> 300 /<; (B>1B> 0,3 <; 5=>:A0?0@8=C @>72545=>3> C 10 <); (482. B01;8FN =86G5).

1□T<8, =5>1EV4=V 4;O V=T:FV9=>3> 22545==O, :>;8 @>72545==O 74V9A=NTBLAO 4;O E2>@8E, O:8< ?@>2>48BLAO :>@>=0@=0

0=3V>?;0AB8:0:

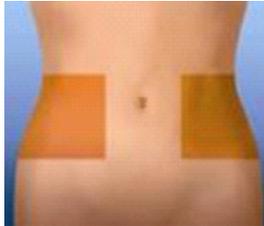
030 (:3)	5>1EV4=0 4>70 0	1□T<, =5>1EV4=89 4;O V=T:FV9=>3> 22545==O, ?@8 @>72545==V 4> 300 /<; (B>1B> 0,3 <; 5=>:A0?0@8=C @>72545=V 2 10 <); (<);
45	1350	4,5
50	1500	5
55	1650	5,5

60	1800	6
65	1950	6,5
70	2100	7
75	2250	7,5
80	2400	8
85	2550	8,5
90	2700	9
95	2850	9,5
100	3000	10

0FVT=B0< 2V:× 2V4 75 @>:V2, O:V 7=0E>4OBLAO =0 ;V:C20==V 7 ?@82>4C 3>AB@>3> V=D0@:BC :0@40 7 ?V49><<< A53<5=B0 ST, ?>G0B:>2C
 2=CB@VH=L>25==C 1>;NA=C V=T:FVN =5 ?@>2>48B8. >6=V 12 3>48= W< A;V4 ?V4H:V@=> 22>48B8 4>7C 75 0=B8-%0 /:3 (BV;L:8 4;O ?5@H8E
 42>E V=T:FV9 <0:A8<0;L=0 AC<0@=0 4>70 AB0=>28BL 7500 0=B8-%0).

=AB@C:FVW I>4> A0<>ABV9=>3> 2545==O ?@5?0@0BC ;5:A0=® C H?@8F-4>7V 7 70E8A=>N A8AB5<>N 3>;:8

1. □8<8B8 @C:8 B0 4V;O=:C, C O:C 1C45 28:>=C20B8AO V=T:FVO ?@5?0@0BC, 2>4>N 7 <8;>
2. ?52=8B8AL C B> 4>1@5 284=> 48B8 ?@5?0@0B.
3. 1@0B8 4V;O=:C C ?@02V9 01> ;V2V9 G0AB8=V 682>B0. ?O=:0<0T 1CB8 2V440;5=0 (C =0?@O 1>:V2) 2V4 ?C?:0 I>=09<5=H5 =0 5 A0=B8<5B@V2.



4. C ?@02C B0 ;V2C AB>@>=8 682>B0, 70;56=> 2V4 B>3>, 2 O:C AB>@>=C 1C;> 7@>1;5=> V=T:FVN<8=C;>3> @07C. G8ABVB8 < 7V A?8@B>



5. 15@56=> 7=OB8 :>2?0G>: 7 3>;:8, ?@8T4=0=>W 4> H?@8F0 7 ?@5?0@0B<< ;5:A0=®. 8:8=CB8 F59 :>2?0G>: (. ?@8F T ?>?5@54=L> =0?>2=5=8< V
 3>B>28< 4> 28:>@8AB0==O. =0B8A:0B8 =0 ?>@H5=L 4> 28:>=0==O V='T:FVWI>1 ?>71CB8AO 1C;L10H>: ?>2VB@O. &5 <>65 ?@8725AB8 4>
 2B@0B8 ;V:0@AL:>3> 70A>1C. VA;O B>3>, O: 7=OB> :>2?0G>:, =5 4>?CA:0B8, I>1 3>;:0 B>@:0;0AO G>3>=51C4L. &5 =5>1EV4=> 4;O
 70157?5G5==O B>3>, I> 3>;:0 1C45 70;8H0B8AO G8AB>N (AB5@8;L=>N).



6. "@8<0B8 H?@8F C @CFV B0:, O: >;V25FL ?@8 ?8ALN @C:>N 7;53:0 27OB8 >G8I5=C 4V;O=:C 682>B0 2:07V2=8< V 25;8:8< ?0;LFO<8, I>1 CB2>@8;0AO A:;04:0 H:V@8. 1>2'07:>2> CB@8BO3<< CAVTW V=T:FVW.



7. "@8<0B8 H?@8F B0:8< G8=><, I>1 3>;:0 1C;0 A?@O<>20=0 4>=87C (25@B8:0;L=> ?V4 :CB>< 90°). 25AB8 3>;:C C H:V@=C A:;04:C =0 ?>2=C 4>268=C.



8. 0B8A=CB8 ?>@H5=L H?@8F0 ?0;LF52O7:>2> CB@8BO3<< CAVTW V=T:FVW.

9. 25AB8 3>;:C, 28BO3CNG8 WW ?@O<> C 72>@>B=>;:0 02B<0B8G=> 2:@8TBLAO 70E8A=8< G>E;> 4@07C 6 28:8=CB8 H?@8F C =091;86G89 :>=B59=5@ 4;O 3>AB@8E ?@54<5BV2.

@8 70E8A=0 A8AB5<0, O:0 ?@872>48BL 4> CB2>@5==O 70E8A=>3> G>E;0, <>65 1CB8 0:B82>20=0 ;8H5 ?VA;O 28?>@>6=5==O H?@8F0 =0B8A:0==O< ?>@H=O 4> :V=FO.

:O C=8:=5==O CB2>@5==O A8=FO =5 @>7B8@0B8 .



VB8. '5@57 2V4ACB=VABL 2V4?>2V4=8E 40=8E =5 @5:>5=4CTBLAO 70AB>A>2C20B8 C ?54V0B@8G=V9 ?@0:B8FV.

5@54>7C20==O.

8?04:>25 ?5@54>7C20==O ?@8 ?V4H:V@=>

@07V :@>2>B5GV 4;O ;V:C20==O 45O:8E E2>@8E <>6=0 70AB>A>2C20B8 ?@>B02CNG8 =0ABC?=V D0:B>@8:

- 5D5:B82=VABL ?@>B0=86G0, =V6 5D5:B82=VABL, 70@5TAB@>20=0 ?@8 ?5@54>7C20==V =5D@0:FV9=>3> 35?0@8=C;

- G5@57 ?>1VG=V 5D5:B8 (7>:@5<0 0=0DV;0:B8G=89 H>:) A;V4 A?>G0B:C @5B5;L=> 72068B8 A?V22V4=>H5==O @878:/:>@8ABL 70AB>AC20==O ?@>B0

59B@0;V70FVN 74V9A=N20B8 H;OE<< ?>2V;L=>3> 2=CB@VH=L>25==>3> 22545==O ?@>B0 3V4@>E;>@84C).

5>1EV4=0 4>70 ?@>B0

- 2V4 22545=>W 4>78 35?0@8=C (100 ?@>B835?0@8=>28E >48=8FL ?@>B0<>;5:C;O@=>3> 35?0@8=C), O:I> 7 <><5=BC 22545==O 5=>:A0?0@8=C =0B@VN ?@>9H;> =5 1V;LH5 8 3>48=;

- 2V4 G0AC, I> ?@>9H>2 7 <><5=BC 22545==O 35?0@8=C:

- <>6=0 ?@>25AB8 V=DC7VN 50 ?@>B835?0@8=>28E >48=8FL ?@>B0:A0?0@8=C =0B@VN, O:I> 7 <><5=BC 22545==O 5=>:A0?0@8=C =0B@VN ?@>9H;> 1V;LH5 8 3>48=, 01> O:I> ?>B@V1=0 4@C30 4>70 ?@>B0

- O:I> 7 <><5=BC V=T:FVW 5=>:A0?0@8=C =0B@VN ?@>9H;> 1V;LH5 12 3>48=, =5<0T =5>1EV4=>ABV 22>48B8 ?@>B0

&V @5:><5=40FVW AB>ACNBLAO E2>@8E 7 =>@<0;L=>N =8@:>2>N DC=:FVTN, O:V >B@82B>@=V 4>78.

4=0: ?>2=VABN =59B@0;V7C20B8 0=B8-%0 0:B82=VABL =5<>6;82>.

V;LH5 B>3>, =59B@0;V70FVO <>65 <0B8 B8289 E0@0:B5@ 2=0A;V4>: >A>1;82>AB59 D0@<0>:V=5B8:8 2A<>:BC20==O =87L:><>;5:C;O@=>3>

35?0@8=C, 2 @57C;LB0BV G>3> <>65 28=8:=CB8 =5>1EV4=VABL @>7?>4V;8B8 7030;L=C @>7@0E>20=C 4>7C ?@>B0

VA;O ?>B@0?;O==O =87L:><>;5:C;O@=>3> 35?0@8=C 2 H;C=>:, =02VBL C 25;8:8E :V;L:>ABOE, BO6:V CA::04=5==O T<0;>9<>2V@=8<8 (B0:8E

28?04:V2 70@5TAB@>20=> =5 1C;>) 2=0A;V4>: =57=0G=>3> 2A<>:BC20==O ;V:0@AL:>3> 70A>1C C H;C=:C B0 :8H5G=8:C.

>1VG=V @50:FVW.

5<>@03VG=V ?@>O28. C;8 70@5TAB@>20=V 28?04:8 7=0G=8E 35<>@03VG=8E CA::04=5=L, 45O:V 7 =8E 1C;8 ;5B0;L=8<8. 5G0AB8<8 ?>1VG=8<8

@50:FVO<8 1C;8 2=CB@VH=L>G5@5?>V B0 @5B@>?5@8B>=50;L=V :@>2>28;828. "0:>6 @5TAB@C20;8AO 28?04:8 35<>@03VG=8E CA::04=5=L

(:@>2>B5GV), B0:8E O: 35<0B><0, 5:EV<>7 C

- V7 AC?CB=V<8 D0:B>@0<8 @878:C: =0O2=VABL >@30=VG=8E C@065=L, I><0NBL AE8;L=VABL 4> :@>2>B5GV, ?52=V :>1V=0FVW ;V:0@AL:8E

70A>1V2 (482. @>74V; «@>B8?>.070==O» B0 «□70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»), 2V.; =0O2=VABL

?>@CH5=L DC=:FVW =8@>:, =87L:0 <0A0 BV;0.

- 7 =54>B@8<0==O< B5@0?52B8G=8E @5:><5=40FV9, 7>:@5<0 B0:8E, I> AB>ACNBLAO B@820;>ABV ;V:C20==O B0 :>@5:FVW 4>78 2V4?>2V4=>

4> <0A8 BV;0 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

0@5TAB@>20=> =5G0ABV 28?04:8 A?V=0;L=>W 35<0B><8 ?VA;O 22545==O =87L:><>;5:C;O@=>3> 35?0@8=C ?V4 G0A A?V=0;L=>W 0=5AB57VW,

0=0;357VW 01> 5?V4C@0;L=>W 0=5AB57VW.

&V ?>1VG=V O28I0 A?@8G8=O;8 =52@>;>3VG=V CH:>465==O @V7=>3> ABC?5=O BO6:>ABV, 2 B>ABV9=89 ?0@0;VG (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

VA;O ?V4H:V@=>W V=T:FVW<>6;825 CB2>@5==O 35<0B><8 C C;8 70@5TAB@>20=V 28?04:8 1>;N C 2C7;8:8 C !?>AB5@V30;>AO 28=8:=5==O B@><1>F8B>?5=VW. A=CT 420 WW B8?8.

"8? , B>1B> =09@>7?>2AN465=VHV 28?04:8, 70728G09 ?>3> ABC?5=O BO6:>ABV (1V;LH5 100000<<3), 7O2;ONBLAO =0 @0==VE 5B0?0E (4> 5 4=O) V =5 ?>B@51CNBL ?@8?8=5==O ;V:C20==O.

"8? , B>1B> =5G0ABV 28?04:8 BO6:>W V0;5@3VG=>W B@><1>F8B>?5=VW (" 7 B@><1>7><; C 45O:8E 28?04:0E B@><1>7 1C2 CA:;04=5=89 V=D0@:B0<8 >@30=V2 01> VH5:. '0AB>B0 28=8:=5==O 4>A;V465=0 =54>AB0B=L> (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

>6;825 157A8<=5 B0 >1>@>B=5 ?V428I5==O @V2=O B@><1>F8BV2.

@8 70AB>AC20==V 35?0@8=V2 1C;8 70@5TAB@>20=V ?>>48=>:V 28?04:8 =5:@>7C H:V@8, ?5@5206=> C ?@8?8=8B8 B5@0?VN.

8=8:0;8 =5G0ABV ?@>O28 A8AB5<=8E 0;5@3VG=8E @50:FV9 (0=0DV;0:B8G=V/0=0DV;0:B>W4=V @50:FVW, 2;;NG0NG8 H>:) 01> @50:FV9 7 1>:C H:V@8 (:@>?82O=:0, A25@1V6, 5@8B5<0, 1C;L>7=V 28A8?0==O), O:V 2 ?52=8E 28?04:0E <>3;8 ?@872>48B8 4> ?@8?8=5==O ;V:C20==O.

/: V ?@8 70AB>AC20==V =5D@0:FV9=8E 35?0@8=V2, =5 28;;NG5=0 <>6;82VABL @>728B:C>AB5>?>@>7C ?@8 ?>4>265==V B@820;>ABV ;V:C20==O.

5D@0:FV=>=>20=V 35?0@8=8 <>6CBL A?@8G8=OB8 3V?>0;L4>AB5@>=V7<, O:89 ?@872>48BL 4> 71V;LH5==O ?;07<>28E @V2=V2 :0;VN. V4:> <>65 28=8:=CB8 ;;V=VG=> 7=0GCIO 3V?5@:0;VTA>1;82> C ?0FVT=BV2 7 E@>=VG=>N =8@:>2>N =54>AB0B=VABN B0 FC:@>28< 4V015B> >2V4><;O;>AO ?@> 28?04:8 B@0=78B>@=>3> ?V428I5==O @V2=V2 B@0=A0F5;N;O@=>3> 01> E>;5AB0B8G=>3> C@065==O ?5GV=:8.

0@5TAB@>20=> 45;V;L:0 28?04:V2 3V?5@:0;VT.

>2V4><;O;>AO ?@> 28=8:=5==O 3>;>2=>3> 1>;N, 0;>?5FVW.

0@5TAB@>20=> 4C65 @V4:> 28?04:8 20A:C;VBC 2=0A;V4>: ?V428I5==O GCB;82>ABV H:V@8.

>A8BL @V4:> 28=8:0;0 3V?5@5>78=>DV;VO, O: V7>;L>20=>, B0: V =0 D=>V H:V@=8E @50:FV9, O:0 7=8:0;0 ?VA;O ?@8?8=5==O ;V:C20==O.

"5@ABV.3 @>:8.

#<>28 715@V30==O. 15@V30B8 C =54>ABC?=>. 5 70<>@>6C20B8.

#?0:>2:0. 10 (2E5): ?> 0,8 <; C H?@8F-4>7V 7 70E8A=>N A8AB5<>N 3>;:8, ?> 2 H?@8F-4>78 C 1;VAB5@V; ?> 5 1;VAB5@V2 C :0@B>==V9 :>@>1FV.

0B53>@VO 2V4?CA:C. 0 @5F5?B>

8@>1=8:.. !0=>DV V=B@>? =40AB@V0, \$@0=FVO.

VAF57=0E>465==O 28@>1=8:0 B0 9>3> 04@5A020465==O 4VO;L=>ABV.

180 @N 0= >@5A 94700 -, \$, \$@0=FVO.

01>

C;L20@ =4CAB@VT;L @><8A;>20 7>=0 76580 □L> "@5, \$@0=FVO.

002=8:.. "«!0=>DV-25=BVA #: @0W=0», #: @0W=0.