

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

"
(EKVATOR)

!,:04:
4VNGV @5G>28=8: ;V78=>?@8;, 0<;>48?V=;
1 B01;5B:0
20 <3 ;V78=>?@8;C (C 283;O4V 21,76 <3 ;V78=>?@8;C 483V4@0BC);
10 <3 0<;>48?V=C (C 283;O4V 13,88 <3 0<;>48?V=C 1578;0BC);
4>?>28=8: <03=VN AB50@0B, =0B@VN :@>E<0;L3;V:>;OB (B8?), F5;N;>70 :@8AB0;VG=0.

V:0@AL:0 D>@<0. "01;5B:8.
A=>2=V DV78:>-EVABV: 1V;V 01><0965 1V;V :@C3;V 42>>?C;;V B01;5B:8 7 3@02V@C20==O< «!F3» 7
>4=>3> 1>:C. V0<5B@: 11 <<.

\$0@<0:>B5@0?52B8G=0 3@C?0. =3V1VB>@8 0=3V>B5=78=?5@5B2>@N20;L=>3> D5@<5=BC (\$) C :>
<1V=0FVW 7 1;>:0B>@0<8 :0;LFVT28E :0=0;V2. V78=>?@8; B0 0<;>48?V=. >4 ""% C09B B03.

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

\$0@<0:>48=0
:20B>@ F5 :><1V=>20=89 ?@5?0@0B 7 DV:A>20=>N :><1V=0FVTN 4>7 4VNG8E @5G>28=
;V78=>?@8;C B0 0<;>48?V=C.
V78=>?@8;.
V78=>?@8; - V=3V1VB>@ D5@<5=BC ?5?B848; 4V?5?BV4078. V= V=3V1CT 0=3V>B5=78=-
?5@5B2>@N20;L=89 D5@<5=B (\$), O:89 :0B0;V7CT ?5@5B2>@5==O 0=3V>B5=78=C I C
207>:>=AB@8:B>@=89 ?5?B84 0=3V>B5=78= II. =3V>B5=78= II B0:>6 AB8AB5@>=C :>@>N
=04=8@:>28E 70;>7. =3V1C20==O \$?@872>48BL 4> 7=865==O :>=F5=B@0FV9 0=3V>B5=78=C II, 2
@57C;LB0BV G>3> 7=86CTBLAO 207>?@5A>@=0 0:B82=VABL V 7<5=HCTBLAO A5:@5FVO
0;L4>AB5@>=C. =865==O >AB0==L>3> <65 ?@872>48B8 4> 71V;LH5==O 220BFV :@>2V.
A:V;L:8 22060TBLAO, I> 2>A=>2V <5E0=V7?@8; 7=86CT 0@B5@V0;L=89 B8A.; ;568BL,
?@83=VG5==O @5=V=-0=3V>B5=78=-0;L4>AB5@>=>2>W A8AB5<8, ;V78=>?@8; 7=86CT
0@B5@V0;L=89 B8A: =02VBL C ?0FVT=BV2 7 0@B5@V0;L=>N 3V?5@B5=7VTN 7 =87L:8< @V2=5<
@5=V=C. \$ V45=B8G=89 :V=V=07V II - D5@<5=BC, O:89 @C9=CT 1@048:V=V=. '8 2V4V3@0NBL
?V428I5=V :>=F5=B@0FVW 1@048:V=V=C, ?>BC6=>3> 2>7>48;0B0B>@=>3> ?5?B84C, @>;L C
B5@0?52B8G=8E 5D5:B0E ;V78=>?@8;C, I5 =5 70A>20=>.

<;>48?V=.
<;>48?V= F5 483V4@>?V@848=>289 V=3V1VB>@ =04E>465==O V>=V2 :0;LFVN (1;>:0B>@ ?>2V;L=8E
:0;LFVT28E :0=0;V2 01> 0=B03>=VAB V>=V2 :0;LFVN), O:89 1;>:CT WE =04E>465==O G5@57<5
<1@0=8 C <O7>2V ;;VB8=8 :0@40 B0 AC48=.
5E0=V7< 3V?>B5=782=>W 4VW 0<;>48?V=C 7C<>2;5=89 ?@O<8< @>7A;01;N20;L=8< 2?;82< =0 3;04:V
<O78 AC48=.
0AB>AC20==O 0<;>48?V=C 1 @07 =0 4>1C I>4=O ?@872>48BL 4> ;;V=VG=> 7=0GCI>3> 7=865==O
0@B5@V0;L=>3> B8A:C C ?0FVT=BV2 7 0@B5@V0;L=>N 3V?5@B5=7VTN O: C 25@B8:0;L=>
@87>=B0;L=>;>65==V 2?@>4>26 24 3>48=. =0A;V4>: ?>2V;L=>3> ?>G0B:C 4VW H284:89
3V?>B5=782=89 5D5:B =5 =0AB0T.
<;>48?V= =5 ?@>O2;OT 1C4L-O:>3> =5A?@8OB;82>3> 2?;82C =0 >128= V :>=F5=B@0FVN ;V?V4V2 ?;07
<8 :@>2V V <>65 70AB>A>2C20B8AO ?@8 ;V:C20==V E2>@8E =0 1@>=EV0;L=C 0AB289 4V015B V
?>403@C.

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

V78=>?@8;.

V78=>?@8; V=3V1VB>@ 0=3V>B5=78=?5@5B2>@N20;L=>3> D5@<5=BC 4;O ?5@>@0;L=>3>
70AB>AC20==O, O:89 =5 W 3@C?8.

A<>:BC20==O. VA;O 70AB>AC20==O 2A5@548=C :>=F5=B@0FVO ?@5?0@0BC C ?;072V 4>AO30T

<0:A848=, E>G0 C ?0FVT=BV2 7 3>AB@8< V=D0@:B>< :0@40 A?>AB5@V30;0AO B5=45=FVO 4>=525;8:>W 70B@8AO3=5==O <0:A8<0;L=>W :>=F5=B@0FVW C A8@>20BFV :@>2V. 0 ?V4AB02V 40=8E ?@> 282545==O V7 A5G5N A5@54=V9 ABC?V=L 2A<:BC20==O ;V78=>?@8;C AB0=>28BL ?@81;87=> 25 %, 20@V015;L=VABL C @V7=8E ?0FVT=BV2 AB0=>28BL 2V4 6 % 4> 60 % C 4>A;V465=>=V 4>7 (2V4 5 4> 80 <3). # ?0FVT=BV2 V7 A5@F52>N =54>AB0B=VABN 01A>;NB=0 1V>4>ABC?=VABL ;V78=>?@8;C 7=86CTBLAO ?@81;87=> 4> 16 %. A<:BC20==O ;V78=>?@8;C =5 70;568BL 2V4 ?@89>>7?>4V; V 7207C20==O 7 1V;:0<8 :@>2V.

V78=>?@8;=5 7207CTBLAO 7 1V;:0<8 A8@>20B:8 :@>2V, 70 28=OB:< F8@:C;NNG>3> 0=3V>B5=78=?5@5B2>@N20;L=>3> D5@<5=BC (\$). >A;V465==O =0 IC@0E ?>:070;8, I> ;V78=>?@8; ?@0:B8G=> =5 ?5@5B8=0T 35<0B>5=F5D0;VG=89 10@T@.

82545==O.

V78=>?@8;=5 <5B01>;V7CTBLAO 2 >@30=V748BLAO 2 =57@07>2>AC20==V 5D5:B82=89 ?5@V>4 =0?V2282545==O ;V78=>?@8;C AB0=>28BL 12,6 3>48=8. 8@:>289 ;V@5=A ;V78=>?@8;C C 74>@>28E 4>1@>2>;LFV2 AB0=>28BL ?@81;87=> 50 <;/E2. =865==O :>=F5=B@0FVW C A8@>20BFV :@>2V <0T B@820;89 B5@4 =0?V2282545==O, I>=5 A?@8OT =0:>?8G5==N ?@5?0@0BC 2 >@30=V74 =0?V2282545==O ?@54AB02;OT =0A8GC20=5 7207C20==O 7 \$ V =5 <0T 4>7>70;56=>3> E0@0:B5@C. \$0@<0:>:V=5B8G=V 2;0AB82>ABV C A?5FV0;L=8E 3@C?0E ?0FVT=BV2.

5GV=:>20 =54>AB0B=VABL.

>@CH5==O DC=:FV9 ?5GV=:8 C ?0FVT=BV2 V7 F8@>7>< ?5GV=:8 ?@8725;> 4> 7=865==O 2A <:BC20==O ;V78=>?@8;C (?@81;87=> =0 30 % 2V4?>2V4=> 4> 40=8E I>4> 282545==O V7 A5G5N), >4=0: 2?;82 ?@5?0@0BC 71V;LH82AO (?@81;87=> =0 50 %) ?>@V2=O=> 7 B0:8< C 74>@>28E 4>1@>2>;LFV2 G5@57 7=865==O ;V@5=AC.

8@:>20 =54>AB0B=VABL.

>@CH5==O DC=:FV9 =8@>: 7=86CT 282545==O ;V78=>?@8;C, O:89 282>48BLAO =8<8, 0;5 F5 7=865==O AB0T ;V=VG=> 7=0GCI8< BV;L:8 ?@8 H284:>ABV ;C1>G:>2>W DV;LB@0FVW <5=H5 30 <;/E2. @8 ;53:V9 V ?>2V9 =54>AB0B=>ABV (;V@5=A :@50B8=V=C 2V4 30 4> 80 <;/E2) A5@54=T 7=0G5==O ?>IV ?V4 :@82>N <:>=F5=B@0FVO-G0A» (AUC) 71V;LHCTBLAO BV;L:8 =0 13 %, B>4V O: ?@8 BO6:V9 =8@>2V9 =54>AB0B=>ABV (;V@5=A :@50B8=V=C 2V4 5 4> 30 <;/E2) A?>AB5@V30TBLAO 71V;LH5==O A5@54=L>3> 7=0G5==O AUC 2 4,5 @070. V78=>?@8; 282>48BLAO 7 >@30=V72V 7=86CTBLAO C A5@54=L>28BL 2V4 40 4> 55 <;/E2.

15@F520 =54>AB0B=VABL.

?0FVT=BV2 V7 A5@F52>N =54>AB0B=VABN 2V47=0G0TBLAO 1V;LH0 :>=F5=B@0FVO ;V78=>?@8;C C ?;072V ?>@V2=O=> 7V 74>@>28<8 4>1@>2>;LFO<8 (71V;LH5==O AUC C A5@54=L>=0 125 %), 0;5 =0 ?V4AB02V 40=8E ?@> 282545==O V7 A5G5N 2A<:BC20==O ;V78=>?@8;C C =8E 7=86CTBLAO ?@81;87=> =0 16 % ?>@V2=O=> 7V 74>@>28<8 >A>10<8.

0FVT=B8 ;VB=L>3> 2V:C.

?0FVT=BV2 ;VB=L>3> 2V:C A?>AB5@V30NBLAO 1V;LH 28A>:0 :>=F5=B@0FVO ;V78=>?@8;C 2 :@>2V B0 1V;LH 28A>:V 7=0G5==O AUC (1V;LH5 ?@81;87=> =0 60 %) ?>@V2=O=> 7 2V:>28<8 ?>:07=8:0<8 <>;>4H8E ?0FVT=BV2.

<;>48?V=.

A<:>:BC20==O.

VA;O 70AB>AC20==O B5@0?52B8G=8E 4>7 0<;>48?V= 4>1@5 2A<:BCTBLAO, 4>AO30NG8 <0:A8 <0;L=>W :>=F5=B@0FVW C ?;072V G5@57 6-12 3>48= ?VA;O 70AB>AC20==O. 1A>;NB=0 1V>4>ABC?=VABL AB0=>28BL 70 >FV=:0<8 2V4 64 4> 80 %. @89>< W6V =5 2?;820T =0 1V>4>ABC?=VABL 0<;>48?V=C.

>7?>4V; V 7207C20==O 7 1V;:0<8 :@>2V.

1AO3 @>7?>4V;C AB0=>28BL ?@81;87=> 21 ;/:3. >A;V465==O in vitro ?>:070;8, I> ?@81;87=> 97,5 % 0 <;>48?V=C 7207CTBLAO 7 1V;:0<8 ?;07<8 :@>2V.

V>B@0=AD>@<0FVO V 282545==O.

"5@4 =0?V2282545==O 7 ?;07<8 :@>2V AB0=>28BL ?@81;87=> 35-50 3>48= V 2V4?>2V40T 70AB>AC20==N ?@5?0@0BC 1 @07 =0 4>1C. <;>48?V= V=B5=A82=> <5B01>;V7CTBLAO C ?5GV=FV 4>=50:B82=>3> <5B01>;VBC, V ;8H5 10 % ?>G0B:>2>W A?>;C:8 V 60 % <5B01>;VBV2 282>4OBLAO V7 A5G5N.

\$0@<0:>:V=5B8G=V 2;0AB82>ABV 2 >A>1;828E 3@C? ?0FVT=BV2.

0AB>AC20==O ?0FVT=B0< V7 ?5GV=:>2>N =54>AB0B=VABN.
;V=VG=V 40=V ?@> 70AB>AC20==O 0<;>48?V=C ?0FVT=B0< V7 ?5GV=:>2>N =54>AB0B=VABN 4C65
>1<565=V. # ?0FVT=BV2 V7 ?5GV=:>2>N =54>AB0B=VABN ;;V@5=A 0<;>48?V=C 7=865=89, I>
?@872>48BL 4> 71V;LH5==O ?5@V>4C =0?V2282545==O V AUC ?@81;87=> =0 40-60 %.
0FVT=B8 ;VB=L>3> 2V:C.
'0A 4>AO3=5==O <0:A8<0;L=>W :>=F5=B@0FVW ?@5?0@0BC C ?;072V C ?0FVT=BV2 ;VB=L>3> 2V:C
V <>;>4H8E ?0FVT=BV2 ?@0:B8G=> >4=0:>25. # ?0FVT=BV2 ;VB=L>3> 2V:C 2V47=0G5=0 B5=45=FVO
4> 7=865==O ;;V@5=AC 0<;>48?V=C, I> ?@872>48BL 4> 71V;LH5==O AUC B0 ?5@V>4C
=0?V2282545==O.
1V;LH5==O AUC V ?5@V>4C =0?V2282545==O C ?0FVT=BV2 V7 70ABV9=>N A5@F52>N
=54>AB0B=VABN 2V4?>2V40;8 >GV:C20==O< 4;O 40=>W 2V:>2>W 3@C?8.

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

>:070==O.

A5=FV0;L=0 0@B5@V0;L=0 3V?5@B5=7VO.

;O 70=B@>;N 70 4>?><>3>N ;V78=>?@8;C B0 0<;>48?V=C, I> ?@89<0NBLAO >4=>G0A=> C B8E 65
4>70E.

@>B8?>:070==O.

>2O70=V 7 ;V78=>?@8;>

- ?V428I5=0 GCB;82VABL 4> ;V78=>?@8;C 01> V=H8E V=3V1VB>@V2

0=3V>B5=78=?5@5B2>@N20;L=>3> D5@<5=BC (\$) ;

- =0O2=VABL 2 0=0<=57V 0=3V>=52@>B8G=>3> =01@O:C ?VA;O 70AB>AC20==O V=3V1VB>@C \$,
A?04:>289 01> V4V>?0B8G=89 0=3V>=52@>B8G=89 =01@O;;

- ?5@28==89 3V?5@0;L4>AB5@>=V7<;

- AB5=>7 =8@:>2>W 0@B5@VW (>4=VTW 01> >1>E);

- 70AB>AC20==O ?0FVT=B0<, O:V 7=0E>4OBLAO =0 35<>4V0;V7V 7 28:>@8AB0==O<

28A>:>?@>B>G=8E <5<1@0= (=0?@8;;04 AN 69);

- @V25=L :@50B8=V=C 2 A8@>20BFV :@>2V > 220

- >4=>G0A=5 70AB>AC20==O :20B>@0 7 ?@>4C:B0<8, O:V 28< 4V015B<< 01> =8@:>2>N

=54>AB0B=VABN (H284:VABL ;;C1>G:>2>W DV;LB@0FVW <60 <;E2./1,73 <2);

- 203VB=VABL 01> 6V=:8, O:V ?;0=CNBL 70203VB=VB8; ?5@V>4 3>4C20==O 3@C44N (482. @>74V;
«0AB>AC20==O C ?5@V>4 203VB=>ABV 01> 3>4C20==O 3@C44N»).

>2O70=V 7 0<;>48?V=>

- ?V428I5=0 GCB;82VABL 4> 0<;>48?V=C 01> V=H8E ?>EV4=8E 483V4@>?V@848=C;

- BO6:0 0@B5@V0;L=0 3V?>B5=7VO;

- H>: (C B>35==89 H>);

- 28@065=89 AB5=>7 0>@B8 01> 3> ;;0?0=0 01> 3V?5@B@>DVG=0 :0@4V>?0BVO 7 ?>@CH5==O<8 35
<>48=0

- 35<>48=0AB0B=VABL ?VA;O ?5@5=5A5=>3> 3>AB@>3> V=D0@:BC:0@40 (?@>BO3>< ?5@H8E 28
4=V2);

- 3>AB@89 V=D0@:B :0@40;

- =5AB01V;L=0 AB5=>:0@4VO (70 28=OB:× AB5=>:0@4VW @8=F<5B0;0).

V428I5=0 GCB;82VABL 4> 1C4L-O:8E 4>?>28= ?@5?0@0BC.

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

70T<>4VW, ?>2O70=V 7 ;V78=>?@8;>

>42V9=0 1;>:040 @5=V=-0=3V>B5=78=-0;L4>AB5@>=>2>W A8AB5<8 (!). 0=V ;;V=VG=8E

4>A;V465=L ?>:070;8, I> ?>42V9=0 1;>:040 @5=V=-0=3V>B5=78=-0;L4>AB5@>=>2>W A8AB5<8 (!)

H;OE>< A?V;L=>3> 70AB>AC20==O \$, II 01> 0;VA:V@5=C 0A>FVNTBLAO 7 ?V428I5=8< @878:><

@>728B:C 0@B5@V0;L=>W 3V?>B5=7VW, 3V?5@:0;VT@CH5==O<8 DC=:FVW =8@>: (2;;NG0NG8

3>AB@C =8@:>2C =54>AB0B=VABL) ?>@V2=O=> 7 <=>=>B5@0?VTN.

VC@5B8:8. @8 70AB>AC20==O ;V78=>?@8;C 7 4VC@5B8:0<8 0=B83V?5@B5=782=89 5D5:B
?>A8;NTBLAO B0 A?>AB5@V30TBLAO @V7:5 7=865==O 0@B5@V0;L=>3> B8A:C. >6;82VABL A8
<0B8G=>W 3V?>B5=7VW ?@8 70AB>AC20==V ;V78=>?@8;C <6;82> 7<5=H8B8 H;OE>< 2V4 ?>G0B:C
;V:C20==O ;V78=>?@8;>
5G>28=8, O:V ?V428ICNBL @V25=L :0;VN: :0;V9715@V30NGV 4VC@5B8:8 (=0?@8:;04,
A?V@>=>;0:B>=, 0@84, B@V0102:8 :0;VN 01> 70;V :0;VN, I> <6CBL ?V428I8B8 @V25=L :0;VN.
0AB>AC20==O B0:8E ?@5?0@0BV2 <65 ?@8725AB8 4> 3V?5@:0;VT C ?>T4=0==V 7 V=3V1VB>@0
<8 \$, >A>1;82> C E2>@8E V7 ?5GV=:>2>N =54>AB0B=VABN. /:I> =5>1EV4=> 70AB>A>2C20B8
AC?CB=V 28I5707=0G5=V 70A>18 7 ;V78=>?@8;<, @5:<5=4CTBLAO ?@>2>48B8 @53C;O@=89
:=B@>;L @V2=O :0;VN C A8@>20BFV :@>2V V DC=:FV>=0;L=8E ?>:07=8:V2 =8@>..
@5?0@0B8 ;VBVN. @8 >4=>G0A=>AC20==V ?@5?0@0BV2 ;VBVN B0 V=3V1VB>@V2 \$ 2V47=0G0;8
72>@>B=5 ?V428I5==O :>=F5=B@0FVW ;VBVN C A8@>20BFV :@>2V V B>:A8G=VABL. 4=>G0A=5
70AB>AC20==O ?@5?0@0BV2 ;VBVN B0 BV0784=8E 4VC@5B8:V2 <65 71V;LHC20B8 @878:
@>728B:C ;VBVT2>W B>:A8G=>ABV V ?>A8;N20B8 265 ?V428I5=C ;VBVT2C B>:A8G=VABL =0 B;V
70AB>AC20==O V=3V1VB>@V2 \$. 4=>G0A=5 70AB>AC20==O ;V78=>?@8;C V ?@5?0@0BV2 ;VBVN
=5 @5:<5=4CTBLAO, 0;5 C 28?04:C 4>:070=>W =5>1EV4=>ABV 70AB>AC20==O 40=>W :<1V=0FVW
=5>1EV4=> :=B@>;N20B8 220BFV :@>2V (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

5AB5@>W4=V ?@>B870?0;L=V 70A>18 (). @8 4>23>AB@>:2>AC20==V =5AB5@>W4=8E
?@>B870?0;L=8E 70A>1V2, C B>2>W :8A;>B8 (1V;LH5 3 3/4>1C), <65 7=86C20B8AL
0=B83V?5@B5=782=89 5D5:B V=3V1VB>@V2 \$.

5AB5@>W4=V ?@>B870?0;L=V 70A>18 V V=3V1VB>@8 \$?@872>4OBL 4> 048B82=>3> 5D5:BC
?V428I5==O :0;VN C A8@>20BFV :@>2V V F5<65 A?@8G8=8B8 ?>3V@H0==O DC=:FV9 =8@>.. &59
5D5:B >1>@>B=89. V4:> <65 28=8=:CB8 3>AB@0 ?5GV=:>20 =54>AB0B=VABL, >A>1;82> C E2>@8E
V7 ?>@CH5==O<8 DC=:FV9 =8@>., B0:8E O: ?0FVT=B8 ;VB=L>3> 2V:C 01> ?@8 7=52>4=5==V.
V:0@AL:V 70A>18, O:V ?@83=VGCNBL DC=:FVN :VAB:>2>3> <>7:C. @8 >4=>G0A=>AC20==V 7
;V78=>?@8;< ?V428ICNBL @878: 28=8=:5==O =59B@>?5=VW B0/01> 03@0=C;>F8B>7C.
AB@>35=8. @8 >4=>G0A=>@30=V7
>;>B>. VB@8B>W4=V @50:FVW (A8<8 207>48;0B0FVW, 2;:NG0NG8 3V?5@5BC, 70?0<@>G5==O,
0@B5@V0;L=C 3V?>B5=7VN, O:0 <65 1CB8 B06:>N) <6CBL 28=8:0B8 G0ABVH5 ?@8 >4=>G0A=>
AC20==V V=3V1VB>@V2 \$ B0 ?@5?0@0BV2 V=T:FV9=>3> 7>;>B0, =0?@8:;04, =0B@VN 0C@>BV>
<0;OBC.
=HV 0=B83V?5@B5=782=V 70A>18: >4=>G0A=5 70AB>AC20==O F8E ?@5?0@0BV2 <65 ?>A8;N20B8
3V?>B5=782=89 5D5:B ;V78=>?@8;C. 4=>G0A=5 70AB>AC20==O 7 =VB@>3;VF5@8=>< 01> V=H8<8
207>48;0B0B>@0<8 <65 I5 1V;LH5 7<5=H8B8 0@B5@V0;L=89 B8A:.
"@8F8:;VG=V 0=B845?@5A0=B8, 0=B8?A8E>B8G=V 70A>18, 70A>18 4;O =0@:>7C, 0=5AB57VW,
=0@:>B8G=V 70A>18 ?@8 70AB>AC20==V>4=>G0A=> 7 V=3V1VB>@0<8 \$?>A8;NNBL
3V?>B5=782=89 5D5:B (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

!8 <6CBL 7<5=H8B8 0=B83V?5@B5=782=89 5D5:B V=3V1VB>@V2 \$.
=B84V015B8G=V: 5?V45;>3VG=V 4>A;V465==O ?>:070;8, I> >4=>G0A=5 70AB>AC20==O
V=3V1VB>@V2 \$ B0 ?@>B84V015B8G=8E 70A>1V2 (V=AC;V=8, ?5@>@0;L=V ?@>B83;V:518) <65
?@8725AB8 4> ?>A8;5==O FC:@>7=86C20;L=>3> 5D5:BC 7 @878:< @>728B:C 3V?>3;V:54>26
?5@H8E B86=V2 :<1V=>20=>3> ;V:C20==O, 0 B0:>6 C E2>@8E V7 =8@:>2>N =54>AB0B=VABN.
F5B8;A0;VF8;>20 :8A;>B0, B@><1>;VB8:8, 15B0-04@5=>1;>:0B>@8, =VB@0B8. V78=>?@8; <6=>
70AB>AC20B8 >4=>G0A=> 7 0F5B8;A0;VF8;>2>N :8A;>B>N C :0@4V>;>3VG=8E 4>70E, B@><1>;VB8:0
<8, 15B0-04@5=>1;>:0B>@0<8 B0/01> =VB@8B0<8.
;>?C@8=>;, ?@>:0W=0AB0B8:8 01> V45?@5A0=B8 (A8AB5<=V :>@B8:>AB5@>W48) <6CBL
?@8725AB8 4> ?V428I5==O @878:C ?>O28 ;59:>?5=VW ?@8 70AB>AC20==V 7 V=3V1VB>@0<8 \$.
=B0F848 7=86CNBL 1V>4>ABC?=VABL ?@8 >4=>G0A=>AC20==V 7 V=3V1VB>@0<8 \$.
B0=>; ?>A8;NT 3V?>B5=782=89 5D5:B.
70T<4VW, ?>2O70=V 7 0<;>48?V=>
=3V1VB>@8 CYP3A4. 4=>G0A=5 70AB>AC20==O 0<;>48?V=C 7 A8;L=8<8 01> ?> :0@8B@> 48;BV075<
<65 ?@8725AB8 4> 7=0G=>3> ?>A8;5==O 2?;82C 0<;>48?V=C, I> B0:>6 <65 ?@8725AB8 4>
?V428I5==O @878:C 28=8=:5==O 3V?>B5=7VW. ;V=VG=V ?@>O28 F8E 20@V0FV9 D0@<0>:V=5B8:8
<6CBL 1CB8 1V;LH 28@065=V C ?0FVT=BV2 ;VB=L>3> 2V:C. "0:8< G8=><, ?>:070=89 ;V=VG=89
:=B@>;L 7 <6;82>N :>@5:FVTN 4>78 0<;>48?V=C.

=4C:B>@8 CYP3A4: =5<0T V=D>@<0FVW ?@> 2?:82 V=4C:B>@V2 CYP3A4 =0 0<;>48?V=. 4=>G0A=5
22545==O 7 V=4C:B>@0<8 CYP3A4 (=0?@8:;04, @8D0<, ?@5?0@0B0<8, I> 1V9 [Hypericum perforatum])
<>65 ?@8725AB8 4> 7=865==O :>=F5=B@0FVW 0<;>48?V=C C ?;072V. 4=>G0A=5 70AB>AC20==O 0
<;>48?V=C @07>< 7 V=4C:B>@0<8 CYP3A4 A;V4 ?@>2>48B8 7 >15@56=VABN.
0AB>AC20==O 0<;>48?V=C 7 3@59?D@CB>< 01> 3@59?D@CB>28< A>:<=5 @5:><5=4CTBLAO,
>A;V;L:8 C 45O:8E ?0FVT=BV2 F5 <>65 ?@8725AB8 4> 71V;LH5==O 1V>4>ABC?=>ABV 0<;>48?V=C, 2
@57C;LB0BV G>3> ?V428ICTBLAO 9>3> 3V?>B5=782=89 5D5:B.
0=B@>;5= (V=DC7VO) C E>4V 4>A;V465=L =0 B20@8=0E ?VA;O 70AB>AC20==O 25@0?025==>3>
22545==O 40=B@>;5=C A?>AB5@V30;0AO DV1@8;OFVO H;C=>G:V2 V A5@F52>-AC48==O
=54>AB0B=VABL V7 AC?CB=L>N 3V?5@:0;VT0;LH8< ;5B0;L=8< =0A;V4:>728B:C 3V?5@:0;VT
<5=4CTBLAO C=8:0B8 >4=>G0A=>3> 70AB>AC20==O 1;>:0B>@V2 :0;LFVT28E :0=0;V2, B0:8E O: 0
<;>48?V=, ?0FVT=B0<, AE8;L=8< 4> 7;>O:VA=>W 3V?5@B5@6 4;O ;V:C20==O 7;>O:VA=>W
3V?5@B5@
?;82 0<;>48?V=C =0 V=HV ;V:0@AL:V 70A>18. V?>B5=782=89 5D5:B 0<;>48?V=C ?>A8;NT
2V4?>2V4=89 5D5:B V=H8E ;V:0@AL:8E 70A>1V2, O:V <0NBL 0=B83V?5@B5=782=V 2;0AB82>ABV.
<;>48?V= =5 2?;820T =0 D0@<0:>:V=5B8:C 0B>@20AB0B8=C, 4V3>:A8=C, 20@D0@8=C 01>
F8;;>A?>@8=C.
!8<20AB0B8=. 4=>G0A=5 70AB>AC20==O ?>2B>@=8E 4>7 10 <3 0<;>48?V=C V 80 <3 A8<20AB0B8=C
?@872>48;> 4> 71V;LH5==O :>=F5=B@0FVW A8<20AB0B8=C =0 77 % ?>@V2=O=> 7 2V4?>2V4=>N
:>=F5=B@0FVTN ?@8 <=>B5@0?VW A8<20AB0B8=>7C A8<20AB0B8=C 4;O ?0FVT=BV2, O:V
70AB>A>2CNBL 0<;>48?V=, A;V4 >1<568B8 20 <3 =0 4>1C.
"0:@>;VA=CT @878: ?V428I5==O @V2=V2 B0:@>;V2V ?@8 >4=>G0A=>AC20==V 7 0<;>48?V=><,
>4=0: D0@<0:>:V=5B8G=89 <5E0=V7< B0:>W 270T<>4VW ?>2=VABN =5 2AB0=>2;5=89.)>1 C=8:=CB8
B>:A8G=>ABV B0:@>;VAC20==V 0<;>48?V=C ?>B@V15= @53C;O@=89 <=>VB>@8=3 @V2=V2
B0:@>;V2V B0, C @07V =5>1EV4=>ABV, :>@5:FVO 4>7C20==O.
?>A?>@8=. >A;V465=L 270T<>4V9 F8;;>A?>@8=C B0 0<;>48?V=C ?@8 70AB>AC20==V 74>@>28<
4>1@>2>;LFO< 01> 2 V=H8E 3@C?0E =5 ?@>2>48;8, 70 28=OB:< 70AB>AC20==O ?0FVT=B0< V7
B@0=A?;0=B>20=>N =8@:>N, C O:8E A?>AB5@V30;>AO 2>W :>=F5=B@0FVW F8;;>A?>@8=C (2
A5@54=L>20=>N =8@:>N, O:V 70AB>A>2CNBL 0<;>48?V=, A;V4 @>73;O=CB8 <>6;82VABL
<=>VB>@V=3C :>=F5=B@0FV9 F8;;>A?>@8=C B0, C @07V =5>1EV4=>ABV, 7<5=H8B8 4>7C
F8;;>A?>@8=C.

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

#AV =02545=V =86G5 ?>?5@5465==O, ?>2 O70=V V7 70AB>AC20==O< >:@5<8E :>=5=BV2, B0:>6
2V4=>AOBLAO 4> :><1V=>20=>3> ?@5?0@0BC :20B>@, B01;5B:8 20 <3/10 <3.

>2O70=V 7;V78=>?@8;>

!8<0B8G=0 0@B5@V0;L=0 3V?>B5=7VO.

!8<0B8G=0 0@B5@V0;L=0 3V?>B5=7VO @V4:> A?>AB5@V30TBLAO C ?0FVT=BV2 7 =5CA:;04=5=>N
0@B5@V0;L=>N 3V?5@B5=7VTN. AB>B=5 7=865==O 0@B5@V0;L=>3> B8A:C C ?0FVT=BV2 7
0@B5@V0;L=>N 3V?5@B5=7VTN, O:V ?@89<0NBL ;V78=>?@8;; <>65 28=8:0B8 7V 7<5=H5==O< >1T
W :@>2V 2=0A;V4>: 70AB>AC20==O 4VC@5B8:V2, AC2>@>W 157A>;L>2>W 4VTB8, 4V0;V7C,
4V0@5W, 1;N20==O, 0 B0:>6 C ?0FVT=BV2 V7 28@065=>N @5=V=70;56=>N 0@B5@V0;L=>N
3V?5@B5=7VTN.

?0FVT=BV2 V7 A5@F52>N =54>AB0B=VABN, I> AC?@>2>46CTBLAO =8@:>2>N =54>AB0B=VABN
01> 157 >AB0==L>W, 70@5TAB@>20=V 28?04:8 28=8:=5==O A8<0B8G=>W 3V?>B5=7VW. >4V1=V
28?04:8 =092V@>3V4=VHV C ?0FVT=BV2 V7 B06:VH8< ABC?5=5< A5@F52>W =54>AB0B=>ABV
2=0A;V4>: 70AB>AC20==O 25;8:8E 4>7 ?5B;L>28E 4VC@5B8:V2, 3V?>=0B@VT DC=:FV>=0;L=>W
=8@:>2>W =54>AB0B=>ABV. # ?0FVT=BV2 V7 ?V428I5=8< @878:<< A8<0B8G=>W 0@B5@V0;L=>W
3V?>B5=7VW A;V4 25AB8 A?>AB5@565==O 70 ?0@0<5B@0<8 3V?>B5=782=>3> 5D5:BC ?VA;O
70AB>AC20==O ?>G0B:>2>W 4>78. &V @5:><5=40FVW AB>ACNBLAO ?0FVT=BV2 7 VH5N
E2>@>1>N A5@FO B0 F5@51@>20A:C;O@=8<8 70E2>@N20==O<8, C O:8E =043> B8A:C <>65
?@8725AB8 4> V=D0@:BC :0@40 01> V=AC;LBC.

28?04:C @>728B:C 0@B5@V0;L=>W 3V?>B5=7VW ?0FVT=BC A;V4 =040B8 ?>;>65==O ;560G8 =0
A?8=V 7 ?@8?V4=OB8<8 =86=V<8 :V=FV2:0<8 V ?>?>2=8B8 2B@0BC @V48=8 (2=CB@VH=L>25==5

2;820==O DV7V>;>3VG=>3> @>7G8=C) ?@8 =5>1EV4=>ABV. "@0=78B>@=0 0@B5@V0;L=0
3V?>B5=7VO =5 T ?@>B8?>:070==O< 4> 70AB>AC20==O ?@5?0@0BC, V ?>40;LH5 4>7C20==O
70728G09 =5 A?@8G8=OT ?@>1;5< ?VA;O ?V428I5==O 0@B5@V0;L=>3> B8A:C 2 @57C;LB0BV
71V;LH5==O >1TW :@>2V.
45O:8E ?0FVT=BV2 V7 A5@F52>N =54>AB0B=VABN 7 =>@<0;L=8< 01> 7=865=8< 0@B5@V0;L=8<
B8A:>< ;V78=>?@8; <>65 A?@8G8=8B8 4>40B:>25 7=865==O A8AB5<=>3> 0@B5@V0;L=>3> B8A:C.
&5 2V4><89 5D5:B, V 70728G09 2V= =5 T ?@8G8=>N 4;O ?@8?8=5==O B5@0?VW. /:I> 0@B5@V0;L=0
3V?>B5=7VO AB0T A8<0B8G=>N, <>65 7=04>18B8AO 7=865==O 4>78 01> ?@8?8=5==O
70AB>AC20==O ;V78=>?@8;C.
@B5@V0;L=0 3V?>B5=7VO ?@8 3>AB@>:0@40.
V:C20==O ;V78=>?@8;< =5 A;V4 @>7?>G8=0B8 C ?0FVT=BV2 V7 3>AB@8< V=D0@:B<< :0@40,
AE8;L=8E 4> @878:C ?>40;LH>3> A5@9>7=>3> ?>3V@H5==O 35<>48=048;0B0B>@0<8. &5 ?0FVT=B8 7
A8AB>;VG=8< 0@B5@V0;L=8< B8A:>< 100 <<. @B. AB. 01> =86G5, 01> 7 :0@4V>35==8< H>:>4>26
?5@H8E 3 4=V2 ?VA;O V=D0@:BC:0@40 4>7C A;V4 7<5=H8B8, O:I> A8AB>;VG=89 0@B5@V0;L=89
B8A: AB0=>28BL 120 <<. @B. AB. 01> =86G5. V4B@878 A;V4 7<5=H8B8 4> 5 <3 01> B82> 4> 2,5 <3,
O:I> A8AB>;VG=89 0@B5@V0;L=89 B8A: AB0=>28BL 100 <<. @B. AB. 01> =86G5. # @07V
715@565==O 0@B5@V0;L=>W 3V?>B5=7VW (A8AB>;VG=89 0@B5@V0;L=89 B8A: <5=H5 90 <<. @B.
AB. 715@V30TBLAO 1V;LH5 1 3>48=8) ;V78=>?@8; A;V4 2V4
!B5=>7 0>@B8, 3V?5@B@>DVG=0 :0@4V>?0BVO, AB5=>7 3> :;0?0=0.
/: V 2AV AC48=>@>7H8@N20;L=V 70A>18, ;V78=>?@8; A;V4 70AB>A>2C20B8 7 >A>1;82>N
>15@56=VABN ?0FVT=B0< 7 >1AB@C:FVTN 28EV4=>3> B@0:BC ;V2>3> H;C=>G:0 V AB5=>7< 3>
:;0?0=0, B0:8<8 O: 0>@B0;L=89 AB5=>7 01> 3V?5@B@>DVG=0 :0@4V>?0BVO ;53:>3> B0 ?>3>
ABC?5=O.
>@CH5==O DC=:FV9 =8@>:.
@8 ?>@CH5==V DC=:FVW =8@>: (:;V@5=A :@50B8=V=C <80 <;/E2) ?>G0B:>2C 4>7C ;V78=>?@8;C
=5>1EV4=> :>@83C20B8 70;56=> 2V4 :;V@5=AC :@50B8=V=C ?0FVT=B0, 0 ?>BV< 70;56=> 2V4
@50:FVW ?0FVT=B0 =0 ;V:C20==O. # B0:8E ?0FVT=BV2 =5>1EV4=> 25AB8 A?>AB5@565==O 70 2<
:0;VN B0 :@50B8=V=C 2 A8@>20BFV :@>2V.
?0FVT=BV2 V7 A5@F52>N =54>AB0B=VABN0@B5@V0;L=0 3V?>B5=7VO ?VA;O ?>G0B:C
;V:C20==O V=3V1VB>@0<8 \$ <>65 ?@8725AB8 4> I5 1V;LH>3> @>7;04C DC=:FV9 =8@>:.. # B0:8E
?0FVT=BV2 <>6;8289 @>728B>: 3>AB@>W =8@>:2>W =54>AB0B=>ABV, O: ?@028;>, >1>@>B=>W.
45O:8E ?0FVT=BV2 V7 42>AB>@>==V< AB5=>7< =8@>:28E 0@B5@V9 01> 7V AB5=>7<
0@B5@VW T48=>W =8@>:8, O:V >B@8@8 \$, <>6;825 ?V428I5==O :>=F5=B@0FVW A5G>28=8 :@>2V
V :@50B8=V=C A8@>20B:8 :@>2V, O: ?@028;>, >1>@>B=5 ?VA;O 2V4AC20==O ;V78=>?@8;C
?@>B8?>:070=> 4;O B0:8E ?0FVT=BV2 (482 @>74V; «@>B8?>:070==O»). @8 =002=>ABV C ?0FVT=B0
B0:>6 @5=>20A:C;O@=>W 3V?5@B5=7VW VA=CT ?V428I5=89 @878: @>728B:C B06:>W
0@B5@V0;L=>W 3V?>B5=7VW B0 =8@>:2>W =54>AB0B=>ABV. V:C20==O F8E ?0FVT=BV2
=5>1EV4=> @>7?>G8=0B8 7 =87L:8E 4>7 ?@8 @5B5;L=>15@56=> B8B@C20B8 4>7C. A:V;L:8
;V:C20==O 4VC@5B8:0<8 <>65 A?@8OB8 @>728B:C 707=0G5=8E 28I5 AB0=V2, WE 70AB>AC20==O
A;V4 ?@8?8=8B8, ?@8 FL>: A;V4 :>=B@>;N20B8 2?@>4>26 ?5@H8E B86=V2 B5@0?VW ;V78=>?@8;>
45O:8E ?0FVT=BV2 7 0@B5@V0;L=>N 3V?5@B5=7VTN 157 28@065=8E ?@>02V2
@5=>20A:C;O@=8E 70E2>@N20=L A?>AB5@V30;>AO ?V428I5==O 2 :@>2V :>=F5=B@0FVW
A5G>28=8 V A8@>20B:>2>3> :@50B8=V=C, C 1V;LH>ABV 28?04:V2AC20==V ;V78=>?@8;C B0
4VC@5B8:0 B0 =09E0@0:B5@=VH5 4;O ?0FVT=BV2 7 ?>?5@54=V< C@065==O< =8@>:.. >4V1=89
AB0= <>65 28<030B8 7=865==O 4>78 B0/01> ?@8?8=5==O 70AB>AC20==O 4VC@5B8:0 B0/01>
;V78=>?@8;C.
@8 3>AB@>:0@40 =5 A;V4 @>7?>G8=0B8 ;V:C20==O ;V78=>?@8;< E2>@8E V7 28@065=8<
?>@CH5==O< DC=:FV9 =8@>: (@V25=L :@50B8=V=C 2 A8@>20BFV :@>2V 28I5 177
V428I5=0 GCB;82VABL, 0=3V>=52@>B8G=89 =01@O:.
8=8:=5==O 0=3V>=52@>B8G=>3> =01@O:C >1;8GGO, :V=FV2>;, 3C1, O78:0, 3>;>A>28E 72O7>: B0
/01> 3>@B0=V 2V47=0G0;>AO C ?0FVT=BV2, O:V >B@8@8 0=3V>B5=78=?5@5B2>@N20;L=>3> D5@
<5=BC, C B>?@8;. =3V>=52@>B8G=89 =01@O: <>65 28=8:=CB8 C 1C4L-O:89 <><5=B ?V4 G0A
;V:C20==O. # B0:8E 28?04:0E A;V4 =5309=> ?@8?8=8B8 70AB>AC20==O ?@5?0@0BC :20B>@.
0FVT=BC A;V4 ?5@51C20B8 ?V4 =03;04< ;V:0@O 4> ?>2=>3> V ABV9:>3> 7=8:=5==O A8 I>=5
AC?@>2>46CTBLAO 48E0;L=>N =54>AB0B=VABN, ?0FVT=B0< <>65 7=04>18B8AO B@820;5

A?>AB5@565==O, >A;V;L:8 ;V:C20==O 0=B83VAB0
=3V>=52@>B8G=89 =01@O:, I> AC?@>2>46CTBLAO =01@O:< 3>@B0=V G8 O78:0, <>65
703@>6C20B8 68BBN V ?@872>48B8 4> ;5B0;L=>3> =0A;V4:C. # B0:8E 28?04:0E A;V4 @>7?>G0B8
70E>48 =52V4:;04=>W 4>?><>38. 0;56=V 70E>48 2;;NG0NBL 70AB>AC20==O 04@5=0;V=C B0/01>
?V4B@8<0==O 2V;L=>W ?@>EV4=>ABV 48E0;L=8E H;OE2, >4=>G0A=> ?>B@V1=> 25AB8
A?>AB5@565==O 70 68BBT2> 206;828<8 DC=:FVO<8 >@30=V728=5= ?5@51C20B8 ?V4 @5B5;L=8<
=03;04<< ;V:0@O 4> ?>2=>3> V AB01V;L=>3> 7=8:=5==O A8
=3V1VB>@8 0=3V>B5=78=?5@5B2>@N20;L=>3> D5@<5=BC G0ABVH5 A?@8G8=ONBL
0=3V>=52@>B8G=89 =01@O: C ?0FVT=BV2 =53@>W4=>W @0A8, =V6 2 >AV1 V=H8E @0A.
0FVT=B8, O:V <0NBL 2 0=0<=57V 0=3V>=52@>B8G=89 =01@O:, =5 ?>2O70=89 V7 70AB>AC20==O<
V=3V1VB>@V2 \$, <>6CBL ?V44020B8AO ?V428I5=>=52@>B8G=>3> =01@O:C ?@8 70AB>AC20==V
V=3V1VB>@V2 \$.
=0DV;0:B>W4=V @50:FVW C ?0FVT=BV2 ?@8 ?@>2545==V 35<>4V0;V7C.
V47=0G0;8 28=8:=5==O 0=0DV;0:B>W4=8E @50:FV9 C ?0FVT=BV2 ?@8 ?@>2545==V 35<>4V0;V7C 7
28:>@8AB0==O< 28A>:> (=0?@8:;04, AN 69), O:V 70AB>A>2C20;8 V=3V1VB>@
0=3V>B5=78=?5@5B2>@N20;L=>3> D5@<5=BC. # B0:8E ?0FVT=BV2 A;V4 70AB>A>2C20B8 DV;LB@
V=H>3> B8?C 01> ?@87=0G0B8 0=B83V?5@B5=782=89 ?@5?0@0B V=H>W 3@C?8. 0AB>AC20==O
;V78=>?@8;C ?@>B8?>:070=> 4;O FVTW :0B53>@VW ?0FVT=BV2 (482 @>74V; «@>B8?>:070==O»).
=0DV;0:B>W4=V @50:FVW ?@8 ?@>2545==V 0D5@57C ;V?>?@>B5W=V2 =87L:>W IV;L=>ABV ()).
V4:> C ?0FVT=BV2, O:V 70AB>A>2C20;8 V=3V1VB>@8 \$?V4 G0A ?@>E>465==O 0D5@57C
;V?>?@>B5W=V2 =87L:>W IV;L=>ABV ()) 7 45:AB@0= AC;LD0B<, @>72820;8AO 0=0DV;0:B>W4=V
@50:FVW, O:V 703@>6CNBL 68BBN. 8=8:=5==O ?>4V1=8E @50:FV9<>6=0 C=8:=CB8, O:I> CB@8@0
<8 \$?5@54 :>6=8< A50=A< 0D5@57C.
5A5=A81V;V70FVO >B@CB>N ?5@5B8=G0AB>:@8;8E :><0E (146>;8, >B@CB0 >A8).
=>4V C ?0FVT=BV2, O:V >B@8@8 \$?V4 G0A 45A5=A81V;V70FVW >B@CB>N
?5@5B8=G0AB>:@8;8E, @>72820;8AO 0=0DV;0:B>W4=V @50:FVW. 8=8:=5==O ?>4V1=8E @50:FV9,
O:V 703@>6CNBL 68BBN, <>6=0 C=8:=CB8, O:I> B82> ?@8?8=8B8 B5@0?VN V=3V1VB>@0<8 \$.
5GV=:>20 =54>AB0B=VABL.
C65 @V4:> 70AB>AC20==O V=3V1VB>@V2 \$ AC?@>2>46C20;>AO A8=4@><<<, O:89 @>7?>G8=02AO
7 E>;5AB0B8G=>W 6>2BO=8FV 01> 35?0B8BC V ?@872>482 4> <8BBT2>3> =5:@>7C ?5GV=:8 B0
V=>4V - ;5B0;L=>3> =0A;V4:C. 5E0=V7< FL>3> A8=4@>
59B@>?5=VO/03@0=C;>F8B>7/B@><1>F8B>?5=VO/0=5
?0FVT=BV2, O:V >B@8@8 \$, 2V47=0G0;>AO 28=8:=5==O =59B@>?5=VW, 03@0=C;>F8B>7C, B@>
<1>F8B>?5=VW B0 0=5@<0;L=>N DC=:FVTN =8@>: V 157 V=H8E CA:;04=NNG8E G8==8:V2
=59B@>?5=VO 28=8:0T @V4:>. 59B@>?5=VO B0 03@0=C;>F8B>7 >1>@>B=V ?VA;O ?@8?8=5==O
70AB>AC20==O V=3V1VB>@V2 \$.
@5?0@0B :20B>@ ?>B@V1=> 70AB>A>2C20B8 7 >A>1;82>N >15@56=VABN ?0FVT=B0< V7
:>;035=>7< AC48=, O:V >B@8AC?@5A82=C B5@0?VN, ;V:C20==O 0;>?C@8=>;< 01> ?@>:0W=0< G8
?@8 =0O2=>ABV :<1V=0FVW F8E CA:;04=NNG8E D0:B>@V2, >A>1;82> O:I> DC=:FVO =8@>:
?>G0B:>2> ?>@CH5=0. # 45O:8E V7 F8E ?0FVT=BV2 @>72820;8AO A5@9>7=V V=D5:FVW, O:V 2
45O:8E 28?04:0E 1C;8 =5 GCB;82V 4> V=B5=A82=>W B5@0?VW 0=B81V>B8:0<8. /:I> B0:V ?0FVT=B8
70AB>A>2CNBL B01;5B:8 :20B>@, @5:<5=4CTBLAO ?5@V>48G=89 :>=B@>;L :V;L:>ABV
;59:>F8BV2, 0 ?0FVT=BV2 A;V4 ?@>V=AB@C:BC20B8 ?@>=5>1EV4=VABL ?>2V4<;OB8 ?@> 1C4L-
O:V >7=0:8 ?@>O2C V=D5:FVW.
>42V9=0 1;>:040 @5=V=-0=3V>B5=78=-0;L4>AB5@>=>2>W A8AB5<8 (!).
0 >A=>2V =0O2=8E 40=8E ACAC20==O V=3V1VB>@V2 \$, 1;>:0B>@8 @5F5?B>@V2 0=3V>B5=78=C II
(II) 01> 0;VA:V@5=C ?V428ICT @878: @>728B:C 3V?>B>=VW, 3V?5@:0;VT@CH5==O DC=:FVW
=8@>: (2;;NG0NG8 3>AB@C =8@>:2C =54>AB0B=VABL). FVTW ?@8G8=8 ?>42V9=0 1;>:040 ! H;OE<
>4=>G0A=>3> 70AB>AC20==O 7 \$, II, 01> 0;VA:V@5=C =5 @5:<5=4CTBLAO.
/:I> ?>42V9=0 1;>:040 ! 01A>;NB=> ?>:070=0, =5>1EV4=5 @5B5;L=5 A?>AB5@565==O D0EV2FO B0
>1>2 O7:>289 <=>VB>@8=3 DC=:FVW =8@>:, 2>4=>-5;5:B@>;VB=>3> 10;0=AC, 0@B5@V0;L=>3>
B8A:C.
\$ V II =5 A;V4 >4=>G0A=> 70AB>A>2C20B8 ?0FVT=B0< 7 4V015B8G=>N =5D@>?0BVTN.
0A0.
=3V1VB>@8 0=3V>B5=78=?5@5B2>@N20;L=>3> D5@<5=BC G0ABVH5 A?@8G8=ONBL

0=3V>=52@>B8G=89=01@O: C ?0FVT=BV2=53@>W4=>W @0A8,=V6 2>AV1 V=H8E @0A. /: V C
28?04:C 7 V=H8<8 V=3V1VB>@0<8 \$, C ?0FVT=BV2=53@>W4=>W @0A8 ;V78=>?@8; <>65 1CB8
<5=H 5D5:B82=89 I>4> 7=865==O 0@B5@V0;L=>3> B8A:C, =V6 C ?0FVT=BV2 V=H>W @0A>2>W
?@8=0;56=>ABV, I>, V<>2V@=>, 7C<>2;5=> 1V;LH 28A>:N G0AB>B>N AB0=V2 V7=87L:8< @V2=5<
@5=V=C C ?0FVT=BV2=53@>W4=>W @0A8, O:V AB@0640NBL=0 0@B5@V0;L=C 3V?5@B5=7VN.
0H5;L.
@8 70AB>AC20==V V=3V1VB>@V2 \$ 2V47=0G0;>AO 28=8:=5==O :0H;N. %0@0:B5@=>, I> :0H5;L
=5?@>4C:B82=89, ABV9:89 V 7=8:0T ?VA;O ?@8?8=5==O ;V:C20==O V=3V1VB>@0<8 \$. !?@8G8=5=89
V=3V1VB>@0<8 \$:0H5;L ?>B@V1=> @>73;O40B8 ?@8 48D5@5=5V0;L=V9 4V03=>AB8FV :0H;N.
%V@C@3VG=5 2B@CG0==O, 0=5AB57VO.
@8 25;8:8E >?5@0FVOE 01> ?@8 70AB>AC20==V 70A>1V2 4;O =0@:>7C, I> A?@8G8=ONBL
3V?>B5=7VN, ;V78=>?@8; 30;L@=5 282V;L=5==O 0=3V>B5=78=C-II. V?>B5=7VN, I> 2V47=0G0TBLAO
C FL>2V4=> 4> >?8A0=>3> <5E0=V7
V?5@:0;VT
45O:8E ?0FVT=BV2 ?@8 ;V:C20==V V=3V1VB>@0<8 \$ A?>AB5@V30;>AO ?V428I5==O 220BFV
:@>2V. 878: @>728B:C 3V?5@:0;VT2>N=54>AB0B=VABN, 3>AB@>N A5@F52>N=54>AB0B=VABN,
?@8 453V4@0B0FVW, <5B01>;VG=>7V, C ?0FVT=BV2, O:V 70AB>A>2CNBL >4=>G0A=>
:0;V9715@V30NGV 4VC@5B8:8, ?@5?0@0B8 :0;VN 01> 70;V, I> C ?0FVT=BV2, O:V 70AB>A>2CNBL
V=HV ?@5?0@0B8, I> ?V428ICNBL 220BFV :@>2V (=0?@8;:04, 35?0@8=). /:I> T ?>:070==O 4>
>4=>G0A=>3> 70AB>AC20==O ?@5?0@0BC :20B>@ V7 28I52:070=8<8 70A>10<8, @5:><5=4CTBLAO
@53C;O@=> :>=B@>;N20B8 220BFV :@>2V (482. @>74V; «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10
<8 B0 V=HV 2848 270T<>4V9»)).
5@28==89 3V?5@0;L4>AB5@>=V7
;O ?0FVT=BV2, O:V AB@0640NBL=0 ?5@28==89 0;L4>AB5@>=V7<, V=3V1VB>@8 \$ =55D5:B82=V,
B>AC20==O ;V78=>?@8;C=5 @5:><5=4CTBLAO.
@>B5W=C@VO.
?>>48=>:V 28?04:8 @>728B:C ?@>B5W=C@VW C ?0FVT=BV2, >A>1;82> 7V 7=865=>N=8@:>2>N
DC=:FVTN 01> ?VA;O ?@89>:8E 4>7 ;V78=>?@8;C. # @07V ;V=VG=> 7=0GCI>W ?@>B5W=C@VW
(28I5 1 3/4>1C) ?@5?0@0B A;V4 70AB>A>2C20B8 BV;L:8 ?VA;O >FV=:8 B5@0?52B8G=>W :>@8ABV
B0 ?>B5=5V9=>3> @878:C V ?@8 ?>ABV9=>=B@>;V ;V=VG=8E B0 1V>EV:07=8:V2.
0FVT=B8 7 FC:@>28< 4V015B>
?0FVT=BV2 7 FC:@>28< 4V015B><, O:V 70AB>A>2CNBL 3V?>3;V:5 01> >B@84>26 ?5@H>3> @>< \$
A;V4 74V9A=N20B8 @5B5;L=89 :>=B@>;L 3;V:574V; «70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0
V=HV 2848 270T<>4V9»)).
@5?0@0B8 ;VBVN.
/: ?@028;>, =5 @5:><5=4CTBLAO :><1V=0FVO ?@5?0@0BV2 ;VBVN V ;V78=>?@8;C (482. @>74V; «70T
<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»)).
03VB=VABL V ;0:B0FVO.
:20B>@ ?@>B8?>:070=89 C ?5@V>4 203VB=>ABV. 0AB>AC20==O ?@5?0@0BC =5 A;V4
@>7?>G8=0B8 C ?5@V>4 203VB=>ABV 01> 6V=:0<, O:V ?;0=CNBL 70203VB=VB8. @8 2AB0=>2;5==V
203VB=>ABV ;V:C20==O ?@5?0@0B< :20B>@ ?>B@V1=> =5309=> ?@8?8=8B8 V ?5@525AB8
?0FVT=B:C=0 V=H89 3V?>B5=782=89 70AV1 4>72>;5=89 4> 70AB>AC20==O C ?5@V>4 203VB=>ABV.
0AB>AC20==O ?@5?0@0BC :20B>@ C ?5@V>4 3>4C20==O 3@C44N ?@>B8?>:070=>.
>2O70=V 7 0<;>48?V=>
57?5:0 B0 5D5:B82=VABL 70AB>AC20==O 0<;>48?V=C ?@8 3V?5@B>=VG=>2;5=0.
0FVT=B8 7 A5@F52>N=54>AB0B=VABN.
;O ?0FVT=BV2 V7 A5@F52>N=54>AB0B=VABN 0<;>48?V= A;V4 70AB>A>2C20B8 7 >15@56=VABN. #
B@820;>:>=B@>;L>20=>A;V465==V ?0FVT=BV2 V7 B06:>N A5@F52>N=54>AB0B=VABN (:0AC III
V IV 70 ;:0A8DV:0FVTN LN->@:AL:>W :0@4V>;>3VG=>W 0A>FV0FVW, NYHA) C 3@C?V
?0FVT=BV2, O:V >B@8.
;>:0B>@8 :0;LFVT28E :0=0;V2, C B>
0AB>AC20==O ?0FVT=B0< 7 ?5GV=:>2>N=54>AB0B=VABN.
?0FVT=BV2 V7 ?5GV=:>2>N=54>AB0B=VABN 2V47=0G0NBLAO ?>4>265==O ?5@V>4C
=0?V2282545==O 0<;>48?V=C B0 ?V428I5==O 7=0G5==O AUC, ?@>B5 2V4?>2V4=V @5:><5=40FVW
I>4> 4>7C20==O =5 @>7@>1;5=V. ">AC20==O 0<;>48?V=C A;V4 @>7?>G8=0B8 7

0FVT=B8 ;VB=L>3> 2V:C.

;O ?0FVT=BV2 ;VB=L>3> 2V:C ?V428IC20B8 4>7C A;V4 7 >15@56=VABN (482. @>74V; «!>AV1 70AB>AC20==O B0 4>78»).

0AB>AC20==O ?@8 =8@:>2V9 =54>AB0B=>ABV.

"0:8< ?0FVT=B0< 0<;>48?V= <>6=0 ?@87=0G0B8 C 728G09=8E 4>70E. =F5=B@0FV9 0<;>48?V=C C ?;07 2V =5 :>@5;NNBL 7V ABC?5=5< =8@:>2>W =54>AB0B=>ABV. <;>48?V= =5 282>48BLAO 70 4>?> <>3>N 4V0;V7C.

>2V4><;O;>AO ?@> >1>@>B=V 1V>EV;>2:8 A?5@<0B>7>W40 C 45O:8E ?0FVT=BV2 ?@8 70AB>AC20==V 1;>:0B>@V2 :0;LFVT28E :0=0;V2. ;V=VG=>W V=D>@<0FVW I>4> ?>B5=V9=>3> 2?;82C 0<;>48?V=C =0 D5@B8;L=VABL =54>AB0B=L>.

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

03VB=VABL.

:20B>@ ?@>B8?>:070=89 C ?5@V>4 203VB=>ABV. 0AB>AC20==O ?@5?0@0BC =5 A;V4

@>7?>G8=0B8 C ?5@V>4 203VB=>ABV 01> 6V=:0<, O:V ?;0=CNBL 70203VB=VB8.

@8 2AB0=>2;5==V 203VB=>ABV ;V:C20==O ?@5?0@0B< :20B>@ ?>B@V1=> =5309=> ?@8?8=8B8 V ?5@525AB8 ?0FVT=B:C =0 V=H89 3V?>B5=782=89 70AV1, 4>72>;5=89 4> 70AB>AC20==O C ?5@V>4 203VB=>ABV.

>4C20==O 3@C44N.

0AB>AC20==O ?@5?0@0BC :20B>@ C ?5@V>4 3>4C20==O 3@C44N ?@>B8?>:070=>.

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.

@5?0@0B <>65 2?;820B8 =0 740B=VABL :5@C20B8 02B<>1V;5< 01> ?@0FN20B8 7 <5E0=V7<0<8 7

?V428I5=8< @878:>< B@02<0B87A>1;82> =0 ?>G0B:C 70AB>AC20==O), B> A;V4 287=0G0B8, ?@8 O:V9 4>7V ?@5?0@0BC <>6=0 :5@C20B8 02B<>1V;5< 01> 28:>=C20B8 @>1>BC, ?>2O70=C 7 @878:>< ?V428I5=>3> B@02<0B87

>2O70=0 7 ;V78=>?@8;> >6;8289 @878: @>728B:C 70?0<>@>G5==O 01> ?V428I5=>W 2B<>;N20=>ABV.

>2O70=0 7 0<;>48?V=> <;>48?V= <>65 74V9A=N20B8 =57=0G=89 01> ?> :5@C20==O B@0=A?>@B=8<8

70A>10<8 V <5E0=V7<0<8. # ?0FVT=BV2, O:V 2V4GC20NBL 70?0<>@>G5==O, 3>;>2=89 1V;L,

?V428I5=C 2B<>;N20=VABL 01> =C4>BC, <>65 ?>@CHC20B8AO 740B=VABL 4> @503C20==O. 5:>

<5=4CTBLAO 4>B@815@56=>ABV, >A>1;82> =0 ?>G0B:C ;V:C20==O.

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

5:><5=4>20=0 4>70 1 B01;5B:0 =0 4>1C. 0:A8<0;L=0 4>1>20 4>70 1 B01;5B:0.

72O7:C 7 B8<, I> W60 =5 2?;820T =0 2A<>:BC20==O 4VNG8E @5G>28=, ?@5?0@0B <>6=0

70AB>A>2C20B8 =570;56=> 2V4 ?@89>

/: ?@028;>, :<1V=>20=89 ?@5?0@0B 7 DV:A>20=>N :<1V=0FVTN 4>7 ;V78=>?@8;C B0 0<;>48?V=C

=5 A;V4 70AB>A>2C20B8 4;O ?>G0B:>2>W B5@0?VW.

@5?0@0B :20B>@, B01;5B:8 20 <3/10 <3, ?>:070=89 BV;L:8 B8< ?0FVT=B0<, 4;O O:8E B8B@>20=V >?B8

<0;L=V ?V4B@878 ;V78=>?@8;C B0 0<;>48?V=C AB0=>2;OBL 20<3 V 10 <3 2V4?>2V4=>. /:I>

=5>1EV4=> :>@83C20B8 4>7C, <>6=0 @>73;O=CB8 B8B@C20==O 4>78 >:@5<8E :>=5=V2

?@5?0@0BC.

0FVT=B8 7 =8@:>2>N =54>AB0B=VABN.

;O 287=0G5==O >?B8<0;L=>W ?>G0B:>2>W 4>78 V ?V4B@8W 4>78 C ?0FVT=BV2 V7 =8@:>2>N

=54>AB0B=VABN B8B@C20==O 4>7 A;V4 ?@>25AB8 2 V=482V4C0;L=>@O4:C, 28:>@8AB>2CNG8

>:@5=5=B8 ?@5?0@0BC - ;V78=>?@8; B0 0<;>48?V=.

E>4V B5@0?VW ?@5?0@0B< :20B>@ A;V4 ?@>2>48B8 ?>ABV9=89 :>=B@>;L DC=:FVW =8@>;, 0

B0:>6 220BFV :@>2V. # @07V ?>@CH5==O DC=:FVW =8@>: 70AB>AC20==O ?@5?0@0BC :20B>@

A;V4 ?@8?8=8B8 V 70:@5<8<8 A;;04>28<8 7 2V4?>2V4=8<8 7

0FVT=B8 7 ?5GV=:>2>N =54>AB0B=VABN.

'VB:V @5:><5=40FVW I>4> @5687C20==O 4;O ?0FVT=BV2 V7 ?>@CH5==O< DC=:FV9 ?5GV=:8 2V4

;53:>3> 4> ?>3> ABC?5=O =5 2AB0=>2;5=V.)>1 287=0G8B8 >?B8<0;L=C AB0@B>2C 4>7C B0 ?V4B@8

7C 4;O ?0FVT=BV2 V7 ?5GV=:>2>N =54>AB0B=VABN, @568< 4>7C20==O =5>1EV4=> 287=0G0B8 2

V=482V4C0;L=>@O4:C, 70AB>A>2CNG8 >:@5<> ;V78=>?@8; B0 0<;>48?V=.

\$0@<0:>V=5B8G=8E 4>A;V465=L 0<;>48?V=C C ?0FVT=BV2 V7 BO6:>N ?5GV=:>2>N
=54>AB0B=VABN =5 ?@>2>48;8. >7C20==O 0<;>48?V=C 4;O ?0FVT=BV2 V7 28@065=>N ?5GV=:>2>N
=54>AB0B=VABN A;V4 @>7?>G8=0B8 7 =09<5=H>W 4>78 V ?>2V;L=> B8B@C20B8 4> >?B8<0;L=>W
4>78.

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

0FVT=B0< ;VB=L>3> 2V:C ?@5?0@0B A;V4 ?@87=0G0B8 7 >15@56=VABN.

DV;N 5D5:B82=>ABV 01> 157?5:8 0<;>48?V=C 01> ;V78=>?@8;C 70;56=> 2V4 2V:C =5

A?>AB5@V30;>AO. ;O ?V41>@C >?B8<0;L=>W ?V4B@8W 4>78 C ?0FVT=BV2 ;VB=L>3> 2V:C

B8B@C20==O 4>7 A;V4 ?@>25AB8 2 V=482V4C0;L=>@O4:C, 28:>@8AB>2CNG8 2V;L=C :><1V=0FVN
;V78=>?@8;C B0 0<;>48?V=C.

VB8.

57?5:0 B0 5D5:B82=VABL 70AB>AC20==O ?@5?0@0BC :20B>@ 4VBO< =5 2AB0=>2;5=V. @5?0@0B
?@>B8?>:070=89 FV9 3@C?V ?0FVT=BV2.

5@54>7C20==O.

5@54>7C20==O ?@5?0@0BC :20B>@ <>65 ?@8725AB8 4> =04W ?5@8D5@8G=>W 207>48;0B0FVW 7
28@065=>N 0@B5@V0;L=>N 3V?>B5=7VTN, 3>AB@>W AC48==>W =54>AB0B=>ABV,
5;5:B@>;VB=>3> 48A10;0=AC, =8@:>2>W =54>AB0B=>ABV, 3V?5@25=B8;OFVW, B0EV:0@4VW,
?@8A:>@5=>3> A5@F518BBO, 1@048:0@4VW, 70?0<@>G5==O, B@82>6=>ABV V :0H;N. >2V4>
<;O>AO ?@> @>728B>: 7=0G=>W B0, <>6;82>, B@820;>W A8AB5<=>W 0@B5@V0;L=>W 3V?>B5@:
V7 ;5B0;L=8< =0A;V4:>

5:><5=4CTBLAO ?@>2545==O A8<0B8G=>3> ;V:C20==O (=040B8 ?0FVT=BC ?>;>65==O ;560G8 =0
A?8=V 7 ?@8?V4=OB8<8 =86=V<8 :V=FV2:0<8, ?@>2>48B8 A?>AB5@565==O V ?@8 =5>1EV4=>ABV
?V4B@81□T< F8@:C;NNG>W :@>2V B0 5;5:B@>;VB=89 10;0=A, 0 B0:>6 :>=F5=B@0FVN :@50B8=V=C
2 A8@>20BFV :@>2V). # @07V 7=0G=>W 0@B5@V0;L=>W 3V?>B5=7VW =5>1EV4=> ?>:;0AB8
?0FVT=B0 C ?>;>65==O ;560G8 V ?@8?V4=OB8 =86=V :V=FV2:8 28I5 @V2=O 3>;>28. /I> 22545==O
@V48=8 =5 40;> 4>AB0B=L>3> @57C;LB0BC, <>65 7=04>18B8AO ?V4B@8?@5A>@V2 70 C<>28
2V4ACB=>ABV ?@>B8?>:070=L 4> WE 70AB>AC20==O. >6;820 B5@0?VO 0=3V>B5=78=>< II, O:I>
?@5?0@0B 4>ABC?=89. =CB@VH=L>25==5 22545==O 3;N:>=0BC :0;LFVN <>65 28O28B8 ?>78B82=89
2?;82 =0 72>@>B=89 @>728B>: 5D5:BV2, A?@8G8=5=8E 1;>:04>N :0;LFVT28E :0=0;V2.

A:V;L:8 0<;>48?V= 2A<:BCTBLAO ?>2V;L=>, C 45O:8E 28?04:0E <>65 1CB8 5D5:B82=8< ?@><820==O
H;C=:0 (01> HBCG=> A?@8G8=5=5 1;N20==O) B0 22545==O A>@15=BV2 V =0B@VN AC;LD0BC.

A:V;L:8 0<;>48?V= 4>1@5 72O7CTBLAO 7 1V;:0<8 :@>2V, 4V0;V7 =55D5:B82=89.

V78=>?@8; <>6=0 2840;8B8 V7 A8AB5<=>3> :@>2>B>:C H;OE< ?@>2545==O 35<>4V0;V7C.

8:>@8AB0==O 28A>:>?@>B>G=8E ?>;V0:@8;>=VB@8;>28E <5<1@0= ?V4 G0A 4V0;V7C =5 @5:>
<5=4CTBLAO.

>1VG=V@50:FVW.

>1VG=V 4VW 70728G09 <8=CIV V <0;>28@065=V, B>2>48BLAO @V4:>.

09G0ABVH5 28=8:0;8 3>;>2=89 1V;L, :0H5;L V 70?0<@>G5==O.

0 A8AB5<0<8 >@30=V2 V 70 G0AB>B>N ?>O2V2 (4C65 G0AB> (≥ 1/10); G0AB> (2V4 ≥ 1/100 4> <1/10);
=5G0AB> (2V4 ≥ 1/1000 4> <1/100); @V4:> (2V4 ≥ 1/10 000 4> <1/1 000); 4C65 @V4:> (<1/10000); =52V4>
<> (=5 <>6=0 >FV=8B8 =0 ?V4AB02V 4>ABC?=8E 40=8E) ?>1VG=V 5D5:B8, I> A?>AB5@V30;8AO V
1C;8 70@5TAB@>20=V 2 E>4V ;V:C20==O ;V78=>?@8;> B0 0<;>48?V=>

;0A A8AB5< >@30=V2	'0AB>B0	5A?@8OB;82V ?>1VG=V @50:FVW ;V78=>?@8;C	5A?@8OB;82V ?>1VG=V @50:FVW 0 ≤;>48?V=C
I>:C A8AB5<8 :@>2V V ;VW A8AB5 <8	C65 @V4:>	@83=VG5==O DC=:FVW :VAB:>2>3><7:C, 03@0=C;>F8B>7 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»), ;59:>?5=VO, =59B@>?5=VO, B@><1>F8B>?5=VO, 35 <>;VB8G=0 0=5045=><>?0BVO	"@><1>F8B>?5=VO, ;59:>?5=VO
I>:C VW A8AB5<8	C65 @V4:>	CB>V7;048	;5@3VG=V @50:FVW
I>:C 5=4>:@8==>W A8AB5<8	V4:>	!8=4@>< =5045:20B=>W A5:@5FVW 0=B84VC@5B8G=>3> 3>@ <>=C (!!)	
I>:C >128=	C65 @V4:>	V?>3;V:5	V?5@3;V:5
I>:C ?A8EV:8	5G0AB>	N, ?>@CH5==O A=C	57A>==O, 7N (2;;NG0NG8 =5A?>:V9), 45?@5AVO
	V4:>	!?:CB0=VABL A2V4><>ABV	!?:CB0=VABL A2V4> <>ABV
	52V4><>	5?@5AVO	
I>:C =5@2>2>W A8AB5<8	'0AB>	0?0<>@>G5==O, 3>;>2=89 1V;L	!>=;82VABL, 70?0 <>@>G5==O, 3>;>2=89 1V;L (>A>1;82> =0 ?>G0B:C ;V:C20==O)
	5G0AB>	5@B83>, ?0@5AB57VO, ?>@CH5==O A<0:>28E 2V4GCBBV2 (48A3527VO)	!8=:>?5, B@5<>@, ?>@CH5==O A <0:>28E 2V4GCBBV2 (48A3527VO), 3V?5AB57VO, ?0@5AB57VO
	V4:>	57>@VT=B0FVO, ?>@CH5==O @V2=>2038	
	C65 @V4:>		07>20 3V?5@B>=VO, ?5@8D5@8G=0 =59@>?0BVO
	52V4><>	!8=:>?5	
I>:C >@30=V2 7>@C	5G0AB>		>7;048 7>@C (2;;NG0NG8 48?;>?VN)
I>:C >@30=V2 A;CEC B0 @V2=>2038	5G0AB>		72V= C 2CE0E
I>:C A5@FO	'0AB>		@8A:>@5=5 A5@F518BBO

;0A A8AB5< >@30=V2	'0AB>B0	5A?@8OB;82V ?>1VG=V @50:FVW ;V78=>?@8;C	5A?@8OB;82V ?>1VG=V @50:FVW 0 ≤;>48?V=C
I>:C AC48==>W A8AB5<8	5G0AB>	=D0@:B :0@40, <>6;82>, 2B>@8==89, 2=0A;V4>: =04W 0@B5@V0;L=>W 3V?>B5=7VW C ?0FVT=BV2 3@C?8 28A>:>3> @878:C (482. @>74V; «A>1;82>ABV 70AB>AC20==O»); B0EV:0@4VO, ?@8A:>@5=5 A5@F518BBO	
	C65 @V4:>		=D0@:B :0@40, 0@8B 2C B0EV:0@4VN, <83>B;82C 0@8B
	'0AB>	@B>AB0B8G=0 3V?>B5=7VO	@8?;828
	5G0AB>	=AC;LB, <>6;82> 2B>@8==89, 2=0A;V4>: =04W 0@B5@V0;L=>W 3V?>B5=7VW C ?0FVT=BV2 3@C?8 28A>:>3> @878:C (482. @>74V; «A>1;82>ABV 70AB>AC20==O»); A8=4@< 59=>	@B5@V0;L=0 3V?>B5=7VO
I>:C 48E0;L=>W A8AB5<8	C65 @V4:>		0A:C;VB
	'0AB>	0H5;L, 1@>=EVB	
	5G0AB>	8=VB	048H:0, @8=VB
I>:C H;C=:>2>- :8H:>2>3> B@0:BC	C65 @V4:>	@>=E>A?07<, 0;5@3VG=89 0;L25>;VB/ 5>78=>DV;L=0 ?=52 <=>VO, A8=CA8B, 7048H:0, V=D5:FVW 25@E=VE 48E0;L=8E H;OEV2.	0H5;L
	'0AB>	V0@5O, 1;N20==O	V;L C 682>BV, =C4>B0, ?>@CH5==O ?5@8AB0;LB8:8 :8H5G=8:C (2;;NG0NG8 4V0@5N V 70?>@)
	5G0AB>	V;L C 682>BV, =C4>B0, 48A?5?AVO	;N20==O, 48A?5?AVO, ACEVABL C @>BV
	V4:>	!CEVABL C @>BV	
I>:C 35?0B>IV;V0@=>W A8AB5<8	C65 @V4:>	0=:@50B8B, V=B5AB8=0;L=89 0=3V>=52@>B8G=89 =01@O:	0=:@50B8B, 30AB@8B, 3V?5@B@>DVG=89 3V=3V2VB
	C65 @V4:>	5GV=:>20 =54>AB0B=VABL, 35?0B8B, E>;5AB0B8G=0 6>2BO=8FO (482. @>74V; «A>1;82>ABV 70AB>AC20==O»)	5?0B8B, 6>2BO=8FO

;0A A8AB5< >@30=V2	'0AB>B0	5A?@8OB;82V ?>1VG=V @50:FVW ;V78=>?@8;C	5A?@8OB;82V ?>1VG=V @50:FVW 0 ≤;>48?V=C
I>:C H:V@8 V ?V4H:V@=>W .;VB:>28=8	5G0AB> V4:>	8A8?0==O, A25@1V6 A>@V07, :@>?82O=:0, 0;>?5FVO, 3V?5@GCB;82VABL /0=3V>=52@>B8G- =89 =01@O: >1;8GGO, :V=V2>:, 3C1, O78:0, 3>;>A>28E 72O7>: B0/01> 3>@B0=V (482. @>74V; «A>1;82>ABV 70AB>AC20==O»))	;>?5FVO, 28A8?0==O, 5:70=B5<0, ?C@?C@0, 7;L>@C H:V@8, ?V428I5=5 ?>B>284V;5==O, A25@1V6
	C65 @V4:>	">:A8G=89 5?V45@<0;L=89 =5:@>;V7, A8=4@>< !BV25=A0-6>=A>=0, @<=0 5@8B5<0, ?CE8@G0B:0, ?V428I5=5 ?>B>284V;5==O, ;V F8B><0 H:V@8 *, 3V?5@5	C;LB8D>@<=0 5@8B5<0, 0=3V>=52@>B8G=89 =01@O:, :@>?82O=:0, 5:AD>;V0B82=89 45@ <0B8B, A8=4@>< !BV25=A0-6>=A>=0, =01@O: 2V=:5, D>B>GCB;82VABL
I>:C :VAB:>2>- <O7>2>W A8AB5<8 B0 A?>;CG=>W B:0=8=8	'0AB> 5G0AB>		01@O: 3>: @B@0;3VO, <8 <O7V2, 1V;L C A?8=V
I>:C =8@>: V A5G>282V4=8E H;OE2	'0AB> 5G0AB> V4:> C65 @V4:>	>@CH5==O DC=:FV9 =8@>: >AB@0 ?5GV=:>20 =54>AB0B=VABL, C@5 ;V3C@VO/0=C@VO	>7;048 A5G>28?CA:0==O, =V:BC@VO, ?V428I5==O G0AB>B8 A5G>28?CA:0==O
I>:C @5?@>4C:B82=>W A8AB5<8 B0 <>;>G=8E 70;>7	5G0AB> V4:>	B5=FVO V=5:><0ABVO	B5=FVO, 3V=5:> <0ABVO
030;L=V @>7;048	'0AB> 5G0AB> C65 @V4:>	 V428I5=0 2B><;N20=VABL, 0AB5=VO V4GCBBO 60@C	5@8D5@8G=V =01@O:8, ?V428I5=0 2B><;N20=VABL V;L C 3@C4=V9 .;VBFV, 0AB5=VO, 1V;L, =574C60==O

;0A A8AB5< >@30=V2	'0AB>B0	5A?@8OB;82V ?>1VG=V @50:FVW ;V78=>?@8;C	5A?@8OB;82V ?>1VG=V @50:FVW 0 ≤;>48?V=C
01>@0B>@=V ?:07=8:8	5G0AB>	V428I5==O :>=F5=B@0FVW A5G>28=8 C :@>2V, ?V428I5==O :>=F5=B@0FVW :@50B8=V=C 2 A8@>20BFV :@>2V, 3V?5@:0;VT28E D5@ <5=BV2	=865==O <0A8 BV;0, 71V;LH5==O <0A8 BV;0
	V4:>	=865==O @V2=O 35<>3;>1V=C V 35<0B>:@8BC, ?V428I5==O @V2=O 1V;V@C1V=C 2 A8@>20BFV :@>2V, 3V?>=0B@VT3> 3>@<=>C	
	C65 @V4:>		V428I5==O 0:B82=>ABV ?5GV=:>28E D5@ <5=BV2**

* B@8<0=> 40=V ?@> B5, I> A8=4@<< <>65 2;;NG0B8 >48= 01> 1V;LH5 V7 707=0G5=8E =86G5 A8ABV
>AV40==O 5@8B@>F8BV2 ((), 5>78=>DV;VO V ;59:>F8B>7, 28A8?0==O, A2VB;>GCB;82VABL 01>
V=HV 45@<0B>;>3VG=V ?@>O28.

** 09G0ABVH5 2V4?>2V40T E>;5AB07C.

@8 70AB>AC20==V 0<;>48?V=C B0:>6 ?>2V4><;O;>AO ?@> 28=OB:>2V 28?04:8 @>728B:C
5:AB@0?V@03> A8=4@>

"5@ABV.2 @>:8.

#<>28 715@V30==O. 15@V30B8 ?@8 B50! 2 >@83V=0;L=V9 C?0:>2FV 4;O 70E8ABC 2V4 2?;82C
A2VB;0 B0 2>;>38. @5?0@0B 715@V30B8 2 =54>ABC?=>

#?0:>2:0. > 10 B01;5B>: C 1;VAB5@V; ?> 1 01> ?> 3, 01> ?> 6 1;VAB5@V2 C ?0GFV.

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

8@>1=8:. " «545>= VEB5@», #3>@I8=0.

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

-1103, C40?5HB, 2C;,. 5<@5W, 19-21, #3>@I8=0.