



# MDIA5021

5Xj Yfhjg]b[ 'UbX'7 fYUhj ]hm

HYfa 'CbY' #'&\$&%

7ci fgY`Cj Yfj ]Yk

GHJZ7cbHJWk8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]UV]`]m	@cW]h]cb	D\cbY
>Ua Yg`K ][ [ ]bg	^Ua Yg`k ][ [ ]bg4 i bgk "YXi "Ui			

7ci fgY'8YHJ`g

7fYX]hDc]bhr`\*`

Gi a a UfmicZ\hY'7ci fgY

H\Y`Wci fgY`ZcW`gYg`cb`h\Y`WfYUhj`Y`UgdYWfg`cZUXj`Yfhg]b[ `UbX`W`ffYbhfhYbXg`]b`UXj`Yfhg]b[ "

Mci`k`]`YUfb`\ck`h\Y`UXj`Yfhg]b[ `dfcW`gg`k`cf`g`ZcW`g]b[ `z`]b`dUfh]W`Ufz`cb`h\Y`Zc`ck`]b[ `UgdYWfg.

!`X`Ybh]Z]W]h]cb`cZVca`a`i`b]W]h]cb`W`U`Yb[ `Yg`UbX`cddcfh`b]h]Yg.`fYgdc]bX]b[ `hc`U`W]YbhVf]YZ/  
!`7`fYUhj`Y`ghfUHY[ `]Yg`UbX`dfUW]W]g`Zc`f[ `YbYfU]b[ `]XYUg`Z`W`bW`dhXYg][ `b`z`ghc`fm`h`Y`]b[ `z`Ya`c]cbU`UddYU`g`  
UbX`d]h]W]b[ `Zc`f`W]a`dU][ `bg/  
!`7`Ua`dU][ `b`Yj`U`i`U]h]cb`a`Y`h`c`Xg"

H\Y`fYei`]fYa`Ybhr`Zc`f`UbX`]a`dUW]h]cZUXj`Yfhg]b[ `UW`cgg`a`i`h]d`Y`d`U]h]z`fa`g`UbX`Uggc]W]U]h]X`fYei`]fYa`Ybhr`  
Zc`f`X][ `]U`]b]h]fUW]j`]m`z`W`U`V`c`f`U]h]cb`UbX`W`c`!`dfc`Xi`W]h]cb`k`]`VY`Ya`d`U]g]nYX"

7ci fgY`@YUfb]b[ `Ci`hWca`Yg

%`5`dd`m]W]YUhj`Y`ghfUHY[ `]Yg`UW`cgg`U`V`f`c`UX`f`Ub[ `Y`c`ZUXj`Yfhg]b[ `a`YX]U  
&`8`Yj`Y`cd`U`W]h]W`i`b`X`Y`gh`UbX]b[ `c`ZUXj`Yfhg]b[ `c`V`Y`W]j`Yg  
'`" `7`f]h]ei`Y`UbX`fYj`]gY`mci`f`k`cf`\_  
(`" `K`cf`\_`Y`Z`Y`W]j`Y`mk`]h`]Z`Y`X`V`U`W`\_`UbX`dfYg`Ybh]mci`f`]X`Y`U`g`k`]h`]W`c`b`Z`X`Y`b`W`

HYUWX]b[ `G]h]fUHY[ `]Yg`

G]h`XYbhr`k`]`VY`fYei`]fYX`hc`U]h]Y`bX`U`h`c`\`ci`f`g`Ya`]bUf`YUWX`k`YY`\_"`G`Ya`]bUfg`UfY`XYg][ `bYX`hc`]b]h]c`Xi`W`  
U`gh]`XYbhr`]b`U`W`c`bg]g]h]b]h]k`Um]h`h\Y`fY`Yj`Ub]h]h]Y`c]f]Yg`z`d`f`U`W]W]g`UbX`hc`c`g`"H\Y`m]fY`m`Y`Uj`]m]c]b`  
Y]Ua`d`Yg`c`Z`W`c`b]h]a`d`c`f`U`f`m]U]Xj`Yfhg]b[ `hc`d`f`U`W]W]W]m]X`Y`a`c`b`gh]f`U]h]h\Y`h\Y`c]f]Yg`]b`d`f`U`W]W]W]b`fY`U`  
UXj`Yfhg]b[ `g]h]U]h]cbg"

H\Y`gYa`]bUf`Zc`fa`Uh]g]UX`cd`h]Y`hc`VY`h]Y`f`g]a`i`U]h]h\Y`U[ `Yb]W]m]Y]d`Y]f]Y`b]W]z`k`]h`]h]a`Y`gd`Y`bh]Vf]Y]Z]b[  
g]h]XYbhr`cb`k`YY`\_`m]Ugg][ `ba`Ybhr`UbX`UggYgg]b[ `h\Y`Y`Z`Y`W]j`YbYgg`c`Z`h`Y]f`W]YUhj`Y`fYgdc]bgYg`"H\Y`  
ga`U`Y`f[ `fci`dg[ `]`Y`h]a`Y`Zc`f`Z`Y`X`V`U`W`\_`UbX`fY`Z`Y`W]h]cb`cb`fY`Yj`Ub]h]d]f]b]W]d`Yg`UbX`h\Y`c]f]m`G]h]XYbh`  
dU]h]W]d]U]h]cb`k`]`VY`fYei`]fYX`h]fci[`\`ci`hgYa`]bUfg"

7`fYU]h]Y`g\_]`g`UfY`VY`gh`XYj`Y`cd`Y`X`h]fci[`\`h\Y]f`W`c`bg]h]b]h]Udd`]W]h]cb`"H\Y`fY`Zc`fY`z`k`YY`\_`m]Vf]Y]Z]g`UfY`  
XYg][ `bYX`hc`d`f`c]`X`Y`gh]`XYbhr`k`]h`]Ub`c`dd`cf]h]b]m]h]c`X]g]W`c]Yf`UbX`XYj`Y`cd`h\Y]f`c`k`b`W]YUhj`Y`d`f`c`V`Ya`!  
gc`]b[ `g]m]Yg`UbX`g\_]`g"

G]h`XYbhr`UfY`U`gc`Yb]W`c`i`fU[ `YX`hc`U`W]h]j`Y`m]W`c`Y`W]h]Ug`a`Ub]m]d]Y`W]W]g`c`ZUXj`Yfhg]b[ `Wca`a`i`b]W]h]cb`Ug`h`Y`m`  
W]b]Z`ca`U`X]j`YfgY`fUb[ `Y`c`Z`gci`f`W]g`z`hc`\_`Y`Y`d`U`V`f`Y`U`gh]c`Z`W`c`b]h]a`d`c`f`U`f`m]W]a`dU][ `bg`UbX`UXj`Yfhg]b[ `]gg]Yg`  
UbX`Yb]Ub]W]h\Y]f`d`f`U`W]W]W]i`gY`c`Z`h`Y`h\Y`c]f]Yg`z`d`f`c`W]W]ggYg`UbX`hc`c`g`W`c]YfYX`]b`h\Y`W`c`i`fgY"

# 5ggYgga Ybh

## 5ggYgga YbhHUg\_g

5ggYgga YbhHUg_	K Y][ \h	8i Y'8UH	Gh XYbh@YUfb]b[ Ci hWta Yg'5ggYggYX
C b`]bY`fYZYW]j Y`k f]h]b[ `HUg_`	) i	&* #&#&\$&%%%\$\$`DA	%ž&
7 f]h]WU`UbU`mg]g`	( \$i	\$&#\$( #&\$&%%%\$\$`DA	%ž&ž' ž(
Dcfhž`]c`	) \$i	%* #\$( #&\$&%%%\$\$`DA	%ž&ž' ž(
D]hW`	) i	&' #\$( #&\$&%%%\$\$`DA	&ž(

## 5ggYgga Ybh8YhU]`g

### 5ggYgga Ybh%`C b`]bY`fYZYW]j Y`k f]h]b[ `HUg\_

GHUfhXUH. Bch5dd`]WUVY

8YhU]`g.

&\$\$`k cfXg" `X] ]Xi U`HUg\_"A ccX`Y`Zcfi a ""DUgg# U]`f) i `dUgg/&i `Z]`/\$i `bcblgi Va ]gg]cbE": YYXVUW\_ j ]U`@A G"

Hi fb]h]b`gYh]b[ . H\]g`Ugg][ ba Ybh]g`gi Va ]hX`hfc i [ \ `Hi fb]h]b`UbX`gh XYbhg`Xc`bchgYY`Hi fb]h]b`g]a ]Uf]hmifYdcfrg"

### 5ggYgga Ybh&. `7 f]h]WU`UbU`mg]g

GHUfhXUH. Bch5dd`]WUVY

8YhU]`g.

: ci f`f( E`k f]h]b`X]UfmYbh]Yg`cZUddfc i ") \$\$`k cfXg`YUW/&\$\$\$`k cfXg`]b`hcU"

9ei ]j U`Ybhlc`U`a U`cf`YggUmž`h`YcfYh]WU`fYZYW]cbg`cb`h`Y`Zci`f`a`U]b`hd]Wg`Zcf`h`Y`Wci`fgY`

ϕX] ]Xi U`HUg\_

: YYXVUW\_ j ]U`@A G

Hi fb]h]b`gYh]b[ . H\]g`Ugg][ ba Ybh]g`gi Va ]hX`hfc i [ \ `Hi fb]h]b`UbX`gh XYbhg`Xc`bchgYY`Hi fb]h]b`g]a ]Uf]hmifYdcfrg"

### 5ggYgga Ybh' . `Dcfhž`]c`

GHUfhXUH. Bch5dd`]WUVY

8YHJ]g.

: ci f f( L'WYUj) Y'UXj Yfh]g]b[ 'd]YWg'hc'VY'gi Va ]mX'Ug'Wca dcbYbhg'cZhY'dcfhZ`]c"'=bX]j ]Xi U'hUg\_"  
: YYXVUW\_j ]U'@A G"

Hi fb]hb'gYhb[ . 'H\]g'Ugg][ ba Ybh]g'gi Va ]mX'hfci [ \ 'Hi fb]hb'UbX'ghi XYbhg'Xc'bcHgYY'Hi fb]hb  
g]a ]Uf]mfYdcfhg"

5ggYgga Ybh(. D]hW



F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

6UffmžD" f&\$%\*Ł" H\Y`5Xj Yfhjg]b[ `7cbWdh6cc\_ž' fX`9X]hcbž@cbXcbžH\Ua Yg/`<i Xgcb"

F YWca a YbXYX`F Ygci fWg

5]hW]gcbž>"f&\$\$(Ł`7i h]b[ `9X[ Y`5Xj Yfhjg]b[ ž&bX`9X]hcb"G]b[ UdcfY. `DYUfgcb`<U`"

5`hg]Y`žHca /` ; fck ž>YUžžf&\$%-Ł"5Xj Yfhjg]b[ `7fYU]j Y. `GfUH[ mž7cdmžUbX`8Yg][ bž( h\`YX]hcbž@g

5b[ Y`Yg. `GU[ Y`Di V`]W]hcbg"

<Y[ Uffmž>"f&\$%Ł" <Y[ Uffmicb`5Xj Yfhjg]b[ "`@cbXcb. `H\Ua Yg`UbX`<i Xgcb"

F ca Ubž? "/`A UUgž>"f&\$\$(Ł" <ck `lc`5Xj YfhjgY. `K \Uhk cf\_gžk \UhXcYgb`h! `UbX`k \mž' fX`9X]hcb"

@b]df. `lcf Uß`B fc <Ym

Gi ``j Ubž@`f&\$\$(Ł" <YmžK \]dd" j V` bž` Yfk ž ž V`Xj Yh]j Y. `fYU ]j Y. Yfhjg]b[ ž&bX`9X]

Gi Va ]gg]cb 'cZ5ggYgga YbhiHUg\_g

Hi fb]h]b 'Gi Va ]gg]cb

≠Zmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UHYa dh]b[ 'hc'gi Va ]hmc i f'Ugg][ ba YbhiHfci [ \ 'Hi fb]h]bž'd'YUgY  
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'- ' , ) " ' ' %cf'Ya U] 'h'Ya 'cb'YI HYfbU'HY'hgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh  
\ci fg'UfY' , .\$Ua '—%\$. \$\$da 'cb'k YY\_XUmg'UbX'-. .\$Ua '—) . \$\$da 'cb'k YY\_YbXg'f1 \*) 'XUmg'U'm'UfL" ≠Zmci  
UfY'i bUV'Y'hc'gi Va ]hmc i f'Ugg][ ba YbhiXi Y'hc'U'Zi 'hk ]h'Hi fb]h]b'mci 'a UmiUdd'm'Zc'f'Ub'YI HYbg]cbž'Vi hmc i  
a i ghfYhU]b'mci f'h]W\_Yhbi a VYf'Zca '9I HYfbU'Gi ddcfhfU'cb[ 'k ]h'Ubmic'h'Yf'fY'Y] UbhXcW a Yb'gk'hc



## 5 WUXYa ]W< cbYgmiUbX`D`U[ ]Uf]ga

D`U[ ]Uf]ga `]g`i g]b[ `hY`k cfXg`cf`]XYUg`cZc`hYfg`UbX`dfYgYbh]b[ `hYa `Ug`mci f`ck b" `#WUb`hU`Y`a Ubm  
Zcfa gZ`Zca `XY`]VYfU`h`V`X`Y`U`h]b[ `h`U`W`Y`X`Y`b`U`m`W`c`d`m]b[ `Z`ca `U`gci f`W`k ]h`ci h`U`W`b`c`k `Y`X[ `Y`a `Y`b`h`

I B G K ` [ fci dg`d`U[ ]Uf]ga `]b`h`c`h`Y`Z`c`ck ]b[ `W`U`h`Y` [ cf]Yg.

7 cdm]b[ .`i`g]b[ `h`Y`g`U`a `Y`cf`j`Y`fmg]a ]U`f`k`cf`X`g`h`c`h`Y`cf][ ]b`U`h`Y`h`cf`]X`Y`U`k ]h`ci h`U`W`b`c`k `Y`X[ ]b[ `h`Y`

- i bXYfgHUbX'mci f'f][ \hg'UbX'fYgdcbg]V] ]hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[ ]Uf]ga ž'Wcdmf][ \hž' BGK 'Gh XYbh7cXY'cZ7cbXi WñUbX'5WwdfUV'Y'I gY'cZ  
I BGK '⇒H'F Ygci fW'g'Dc`]Wñ

