



# MUSC1707

DYfZcfa UbWV '@JVcfUhc fm5

HYfa 'Cby''##'&\$&\$

7 ci fgY`Cj Yfj ]Yk

`GHJZ`7 cbhJW`i8YhJ]`g`

`7 cbj Ybcfg`

B Ua Y				



## 5ggYgga Ybh

Q-YfY'mci 'WUbc'i h]bY'UbmiFY'Yj Ubh]bZcfa Uh]cb'hUhk Ug'bc'h]bWl XYX'']b'5 A G'Vi ha Umidfcj Y'\Y'dZ'`Zcf  
mci f'gh XYbhg": cf'Yl Ua d'Yžmci 'a ][ \hdrcj ]XY'XYfU]g'cb'hY'fYZ'fYbW]b[ 'gmgtYa ž"']b\_g'hc'dfYj ]ci g  
gh XYbhYl Ya d'Ufg'cf'hY'XYg][ bUH'X'k YY\_]b'hY'Włi fgY'hUhmci 'k ]'X]gW gg'hY'UggYgga YbhUh'Yb[ h"


@Yb[ ħ. %\$'a ]bi ħYg

8YĤU]g. 'DYfZcfa UbW #dfYgYbhU]cbg'k ]''VY'WcbXi WYX'Xi f]b[ 'k cf\_g\cd'gYgg]cbg ]b'H%UbX  
H&' 'bghf' a YbhU']ghg'UbX'j cWU']ghg'k ]''dYfZcfa 'cbY'Wca d'YĤ' ]Ĥ'a ' ]b'YUW' Ĥ'fa žk \]W' a UmVY'U  
a cj Ya Ybh'cZU'Uf[ Yf'k cf\_/Wca d'cgYfgžg]a ]Uf'ž'k ]''dfYgYbhĤ'Y'dYfZcfa UbW'cZcbY' ]Ĥ'a 'cf  
a cj Ya Ybh'': YYXVUW\_ 'k f]Ĥ'Yb'fYdcf'g

5XX]ĤcbU'XYĤU]g.

H\]g'k ]''VY'U%'\$!a ]bi Ĥ'Y'WĤ' fY!fYW]Ĥ' 'dfYgYbhU]cbž'Wca d]g]b[ 'Dck YfDc]bhcf'df]bhYX'bcĤ'gžj YfVU'  
dfYgYbhU]cb'g]Ĥ' U]b[ 'Ĥ'Y'k cf\_f'g' d'YfZcfa YX'k ]Ĥ' ]b' ]g'\]ghcf]WU'ž'W' Ĥ' fU'ž'a i g]WU'cf'UYghĤ'YĤ'W'cbĤ'Ĥ' Ĥ'  
UbX'Ĥ'Y'dYfZcfa UbW'cZĤ'Y'k cf\_]ghY'Z'

Gi Va ]gg]cb'bcĤ'g. ]j Y'dfYgYbhU]cb

5ggYgga Ybh(. 'DfUW]WU'YI Ua ]bU]cb

GĤfĤXUĤ. 'Bch5dd']WV'Y

8YĤU]g. : cf'dYfZcfa UbW'gh' XYbĤgž'YI Ua ]bU]cbg'k ]''VY'i bXYĤU\_Yb']b'H' "'GĤ' XYbĤg'k ]''dfYgYbhU  
&\$!a ]bi Ĥ' d'fc[ fUa a Yž']bW' X]b[ 'U'gh' X'ž'YĤ' XY'cf'j cWU']gY'cZUddfc] ]a UĤ'm) !a ]bi Ĥ'gf'X' fU]cbž'XYj ]gYX  
]b'bY[ cĤ]U]cb'k ]Ĥ' Ĥ'Y]f'gdYW]U']ghĤ' Ĥ'fgž'Ĥ'g'i ]Ĥ'Ĥ'Y]f'dYfgcbU' ]bh'fYghg'UbX'fU'Y'W'cf]Yg"'GĤ' XYbĤg  
]XYbh]Z]b[ 'Ug'U'nn'gdYW]U']ghg'k ]''dfYgYbhĤ'Y'W]b]WU'k cf\_'Z'ca 'Ĥ'Y'U'nn'gm'U'Vi g'XYj ]gYX'Z'cf'Ĥ' ]g  
W'ci fgY''Ĥ'Y'YI Ua ]bU]cb'k ]''U'gc' ]bW' XY'U'g'cfhg][ \Ĥ'fYUX]b[ 'Ĥ'ghZ'cf'U''gh' XYbĤg''H\]g'k ]''VY'Ĥ'Y'Z]bU'  
UggYgga Ybh'Ug\_'Z'cf'dYfZcfa Yfg": cf'Wca d'cg]Ĥ'cb'gh' XYbĤgž'd'cf'ž'c' ]cg'k ]''VY'gi Va ]Ĥ'X' ]b'H' "'D'cf'ž' ]cg  
a Um]bW' XY'Ubmbi a VY'f'cZk cf\_gž'Vi Ĥ'Ĥ'Y'Ĥ'Ĥ'Xi fU]cb'cZk cf\_g'g'g'ci 'X'VY'%) 'a ]bi Ĥ'g"'G'W'fYg'g'ci 'X  
VY'gi Va ]Ĥ'X'Z'U'cb[ 'k ]Ĥ' fY'W'cf'X]b[ g'cZU''k cf\_g''H\]g'k ]''VY'Ĥ'Y'Z]bU'UggYgga Ybh'Ug\_'Z'cf  
Wca d'cgYfg": YYXVUW\_ 'K f]Ĥ'Yb'fYdcf'Ĥ'cb'dfUW]WU'YI Ua 'UbX'Wca d'cg]Ĥ'cb'd'cf'ž'c' ]c"



F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

%`9j YfmN]b[ `]g`7 cbbYWX. H\Y`Dck Yf`cZA i g]Wm8 Ub]Y`6UfYbVc]a

&``A ch]cbz`9a ch]cbz`UbX`@cj Y. H\Y`B Uhi fY`cZ5fh]gh]WDYfZcfa UbW`Vm[H\ca Ug`7Ufgcb`A Uf`](#)

` ``@YhYfg`lc`U`Mci b[ `DcYhVmF U]bYf`F ]\_Y

F YWca a YbXYX`F Ygci fWg

Gi Va ]gg]cb`cZ5ggYgga YbhHUg\_g

Gi Va ]gg]cb`cZ5ggYgga YbhHUg\_g

Hi fb]hb`Gi Va ]gg]cb

Ʒmci`YbWci`bhYf`U`dfcV`Ya`k`Yb`U`H`Ya`dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`h`fci`[`\`Hi`fb]hb`z`d`YUgY`  
H`Y`d`l`cb`Y`9I`H`f`b`U`Gi`ddcfh`cb`-`,`)``%`cf`Ya`U]`h`Ya`cb`YI`H`f`b`U`H`f`gi`ddcfh`4`i`bgk`"YXi`"Ui`"Gi`ddcfh`  
`l`ci`fg`UfY`,`.\$\$Ua`-`%\$.\$\$da`cb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`cb`k`YY`YbXg`f`l`\*)`XUmg`U`m`Y`Uf`l`"Ʒmci`  
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`Xi`Y`hc`U`Z`U`h`k`]h`Hi`fb]hb`mc`i`a`Um`Udd`m`Z`f`Ub`YI`H`f`bg]cb`z`Vi`hmc`i`  
a`i`gh`f`Y`h]b`mc`i`f`h]W`Y`h`bi`a`VY`f`Z`ca`9I`H`f`b`U`Gi`ddcfh`f`U`cb[`k`]h`Ub`mc`h`Y`f`f`Y`j`Ub`h`X`c`W`a`Y`b`h`g`l`hc`  
]b`W`i`X`Y`U`g`Y`j`]X`Y`b`W`hc`gi`ddcfh`mc`i`f`YI`H`f`bg]cb`Udd`]W`h]cb"Ʒmci`Ya`U]`9I`H`f`b`U`Gi`ddcfh`mc`i`k`]`  
Ui`hc`a`U`h]W`m`f`Y`W`]j`Y`U`h]W`Y`h`bi`a`VY`f`z`Vi`h]Z`mci`H`Y`d`l`cb`Y`mc`i`k`]`b`Y`Y`X`hc`gd`Y`W`]W`m`U`g`\_`Z`f`cb`Y`  
Hi`fb]hb`U`gc`d`fc`j`]X`Y`g`i`d`X`U`H`Y`g`i`cb`h`Y`j`f`g`m`g`h`Ya`g`h`U`h`g`i`cb`H`k`]h`Y`f`"

;`Yb`Y`f`U`m`z`Ugg`Y`gga`Y`bh`h`U`g`\_`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`cb]W`m`j`]U`Y`]h`Y`f`Hi`fb]hb`cf`U`A`cc`X`Y`  
Ugg][`ba`Y`b`h`h`b`]b`g`h`U`b`W`g`k`Y`f`Y`h`l`g`]g`b`ch`id`c`g`g]V`Y`z`]h`k`]`V`Y`g`h`U`H`X`i`cb`mc`i`f`W`ci`fg`Y`g`A`cc`X`Y`g`]h`k`]h`  
U`h`f`b`U`h]j`Y`gi`Va`]gg]cb`X`Y`h]g`"

:`cf`]b`Z`c`fa`U`h]cb`cb`l`ck`hc`gi`Va`]h`Ugg][`ba`Y`b`h`g`i`cb`]b`Y`j`]U`A`cc`X`Y`.\`h`td`g`#`gh`X`Y`b`h`i`bgk`"YXi`"Ui`#`ack`!  
gi`Va`]h`Ugg][`ba`Y`b`h`a`cc`X`Y`"

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

D`U[ ]Uf]ga ]g`i g]b[ `hY`k cfXg`cf]XYUg`cZchYfg`UbX`dfYgYbh]b[ `hYa`Ug`mci`f`ck`b" `hWUb`hU`Y`a`Ubm`Z`fa`g`z`Z`ca`XY`]VYfUHY`WX`YU]b[ `hc`UW]XYbhU`m`W`dm]b[ `Z`ca`U`gci`f`W`k`]h`ci`h`UW`bck`YX[ `Ya`Ybh`

I`BGK`[ `fci`dg`d`U[ ]Uf]ga`]b`hc`h`Y`Z`ck`]b[ `W]HY`[ `cf]Yg.

7`cdm]b[ `i`g]b[ `h`Y`g`Ua`Y`cf`j`Y`fmg]a`]U`f`k`cf`Xg`hc`h`Y`cf][ ]b`U`h`I`h`cf`]X`Y`U`k`]h`ci`h`UW`bck`YX[ ]b[ `h`Y`g`ci`f`W`cf`i`g]b[ `ei`chU]cb`a`Uf`g" `H`g`U`gc`Udd`Yg`hc`]a`U[ `Yg`z`U`f`h`UbX`XYg][ `b`dfc`Y`Wg`z`Ug`k`Y`U`g`df`Yg`Y`b`h`cbg`k`Y`f`Y`g`ca`Y`cb`Y`d`f`Yg`Y`bh`g`U`bc`h`Y`f`g`]X`Y`U`g`cf`k`cf`Xg`k`]h`ci`h`W`YX]h`

~~U~~ddfcdf]UHY`dUfUd`fUg]b[ `7`U`b[ ]b[ `U`Z`k`k`cf`Xg`UbX`d`f`Ug`Yg`k`Y`a`cghmifYU]b]b[ `h`Y`cf][ ]b`U`g`f`i`W`i`f`Y`UbX`#`f`dfc[ `f`Ygg]cb`c`Z]XYUg`c`Z`h`Y`cf][ ]b`U`z`UbX`]b`Z`ca`U]cb`k`]h`ci`h`UW`bck`YX[ `Ya`Ybh`H`g`U`gc`Udd`Yg`]b`df`Yg`Y`b`h`cbg`k`Y`f`Y`g`ca`Y`cb`Y`d`Uf`Ud`f`Ug`Yg`U`bc`h`Y`f`g`]X`Y`U`g`cf`k`cf`Xg`k`]h`ci`h`W`YX]h`UbX`hc`d]Y]b[ `hc[ `Y`h`Y`f`ei`ch`Yg`UbX`d`Uf`Ud`f`Ug`Yg`]b`hc`U`b`Yk`k`Y`c`Y`z`k`]h`ci`h`Uddfcdf]UHY`f`Y`Z`f`Y`b`W]b[ "

7`c`i`g]cb.`k`cf\_]b[ `k`]h`c`h`Y`fg`Vi`hdUgg]b[ `c`Z`h`Y`k`cf\_]Ug`U`d`Y`fg`cb`g`]b`X]j`]Xi`U`k`cf\_]7`c`i`g]cb`U`gc`]b`Wi`XYg`dfcj`X]b[ `mci`f`k`cf\_]hc`U`bc`h`Y`f`gh`XYbhVYZ`f`Y`h`Y`Xi`Y`X`U`h`z`cf`Z`f`h`Y`di`fdcgY`c`Z`h`Ya`d`U[ ]Uf]g]b[ `Uh`U`bmi]ja`Y`z`d`Um]b[ `U`bc`h`Y`f`d`Y`fg`cb`hc`d`Y`Z`ca`U`b`U`W`X`Y`a`]W`h`Ug`z`gh`U`]b[ `cf`U`W`ei`]f]b[ `U`bc`h`Y`f`d`Y`fg`cb`g`U`W`X`Y`a`]W`k`cf\_]U`b`X`W`d`m]b[ `]h`z`c`Z`Y]b[ `hc`W`ta`d`Y`h`U`bc`h`Y`f`d`Y`fg`cb`g`k`cf\_]cf`g`Y`Y\_]b[ `d`U`ma`Y`bh`Z`f`W`ta`d`Y`h]b[ `U`W`X`Y`a`]W`k`cf\_]`

~~U~~ddfcdf]UHY`W]h]cb.`7`h]b[ `gci`f`W`g`k`Y`W`U`j`Y`b`ch`V`Y`Y`b`f`Y`U`X`z`k`]h`ci`h`UW`bck`YX[ ]b[ `h`Y`g`Y`W`b`X`U`f`m`gci`f`W`Z`ca`k`Y`W`\_bck`YX[ `Y`c`Z`h`Ya`U`g`V`Y`Y`b`c`V`h]b`YX`

8`i`d`]W]h]cb`f`f`g`Y`Z`d`U[ ]Uf]ga`"L`gi`Va`]h]b[ `mci`f`ck`b`k`cf`z`]b`k`Y`c`f`]b`d`U`f`z`k`Y`f`Y`]h`U`g`d`f`Y`]ci`g`m`V`Y`Y`b`d`f`Y`d`U`f`Y`X`c`f`gi`Va`]h`Y`X`Z`f`U`bc`h`Y`f`U`gg`Y`gga`Y`bh`cf`W`ci`fg`Y`U`h`I`BGK`cf`U`bc`h`Y`f`i`b]j`Y`fg]m`

7`c`f`Y`W`i`f`Y`Z`f`Y`b`W]b[ `d`f`U`W]W`g.

- D`U`f`U`d`f`U`g]b[ `z`gi`a`a`U`f]g]b[ `z`Y`gg`U`mk`f]h]b[ `U`b`X`h]a`Y`a`U`b`U[ `Ya`Y`bh`



## 5 WUXYa ]WbZcfa Uhcb`

: cf`YggYbh]U`ghi XYbh]bZcfa Uhcb`fY`Uh]b[ `hc.

- fYei Yghg`Zcf`YI hYbg]cb/
- `UhY`gi Va ]gg]cbg`[ i ]XY`]bYg/
- fYj ]Yk `cZa Uf\_g/
- I B GK `<YU`h`UbX`GUZY`midc`]WYg/
- YI Ua ]bUh]cb`dfcVWXi fYg/
- gdYW]U`Vc]bg]XYfUh]cb`]b`hY`Yj Ybhcz]`bYgg`cf`a ]gUXj Ybh fY/
- ghi XYbhYei ]hmUbX`X]gUV`]`]m/
- UbX`chYf`YggYbh]U`UWUXYa ]W]bZcfa Uh]cbz`gYY

[\hfg.#k k k "Ufng"i bgk "YXi "Ui #W ffYbhghi XYbh\]bZcfa Uhcb`dfc\]Vc`g!\[ i \]XY`\]bYg#](#)

⇒ U[ Y`7 fYX]h

Gc`c`DYfZcfa UbW`A U\_]b[ `&\$%-

7F ⇒ CG

7F ⇒ CG`Dfcj ]XYf`7cXY.`\$\$\$- ;