

### GLS

Basal  $-13.8 \pm 3.0\%$

> 0 %

Mid  $-12.1 \pm 2.8\%$

0 to -5.0 %

Apical  $-14.1 \pm 8.5\%$

-5.1 to -10.0 %

Basal  $-13.8 \pm 3.0\%$

-10.1 to -15.0 %

Mid  $-12.1 \pm 2.8\%$

-15.1 to 18.0 %

Apical  $-14.1 \pm 8.5\%$

< -18.0 %

### CS Epicard

Basal  $-7.6 \pm 11.7\%$

> 0 %

Mid  $-4.2 \pm 9.5\%$

0 to -5.0 %

Apical  $-10.1 \pm 2.4\%$

-5.1 to -13.3 %

Basal  $-7.6 \pm 11.7\%$

< -13.3 %

### CS Endocard

Basal  $-17.9 \pm 13.3\%$

> 0 %

Mid  $-23.7 \pm 10.7\%$

0 to -10.0 %

Apical  $-22.7 \pm 3.7\%$

-10.1 to -20.0 %

Basal  $-17.9 \pm 13.3\%$

-20.1 to -25.5 %

Mid  $-23.7 \pm 10.7\%$

< -25.5 %

### Radial

Basal  $29.1 \pm 1.8\%$

normal

Mid  $60.1 \pm 2.2\%$

pathological

Apical  $25.6 \pm 0.7\%$

> 44.2 %

### Rotation

Basal  $-8.4 \pm 2.1\%$

normal

Apical  $2.6 \pm 0.8\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

Caudal 1.8

Mid 1.7

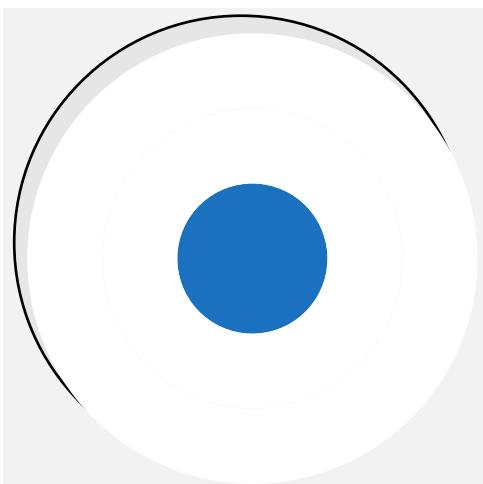
Apical 2.1



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal  $43.2 \pm 6.5$  ms

Mid  $48.5 \pm 9.7$  ms

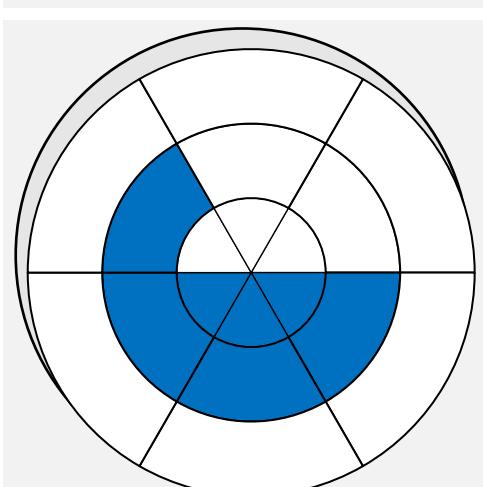
Apical  $50.9 \pm 11.0$  ms



normal



pathological  
 $> 45$  ms



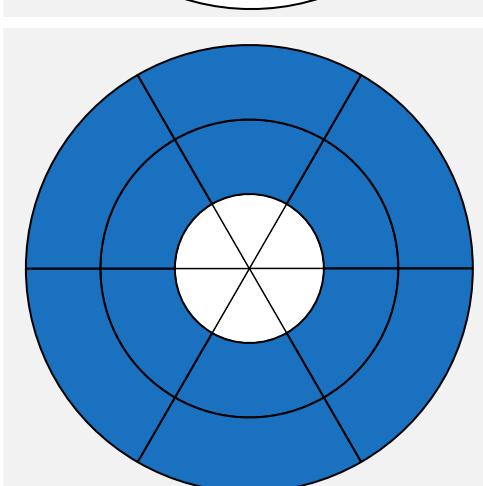
## EGE



normal



pathological



## T1 Mapping

Basal  $1282 \pm 131$  ms

Mid  $1230 \pm 79$  ms

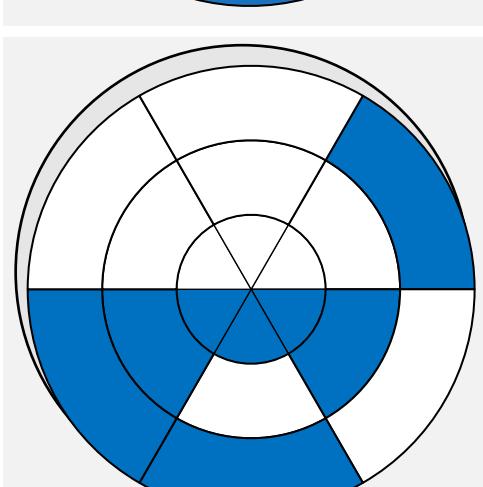
Apical  $1309 \pm 119$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



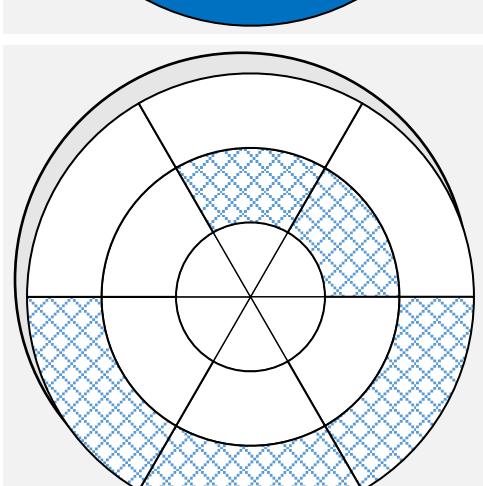
subendocardial



transmural



diffuse



### GLS

Basal  $-17.4 \pm 4.5\%$

> 0 %

Mid  $-16.3 \pm 2.7\%$

0 to -5.0 %

Apical  $-17.8 \pm 3.3\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %

anteroseptal

inferoseptal

anterior

inferior

lateral

inferolateral

### CS Epicard

Basal  $-4.4 \pm 16\%$

> 0 %

Basal

Mid

Apical

Mid not used

0 to -5.0 %

Apical  $-7.8 \pm 6.8\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-10.9 \pm 20.1\%$

> 0 %

Mid not used

0 to -10.0 %

Apical  $-26.1 \pm 10.7\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $25.1 \pm 9.5\%$

normal

Mid not used

pathological

Apical  $41.5 \pm 4.8\%$

> 44.2 %

### Rotation

Basal  $25.1 \pm 9.6\%$

normal

Apical  $2.3 \pm 4.2\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

Caudal 2.9

Mid 2.6

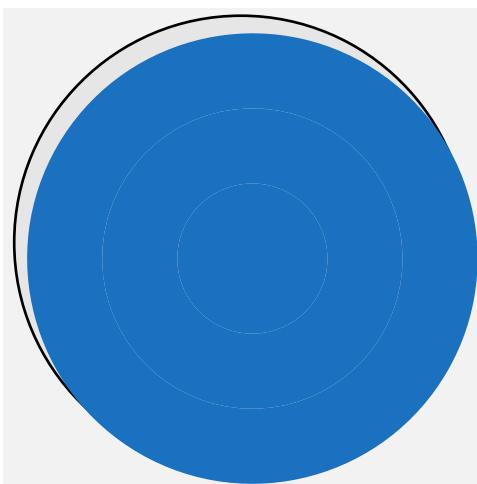
Apical 3



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal  $48.9 \pm 8.6$  ms

Mid  $45.6 \pm 7$  ms

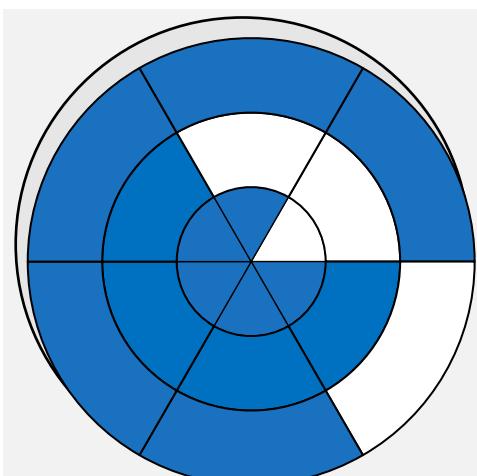
Apical  $49.4 \pm 6.5$  ms



normal



pathological  
 $> 45$  ms



## EGE



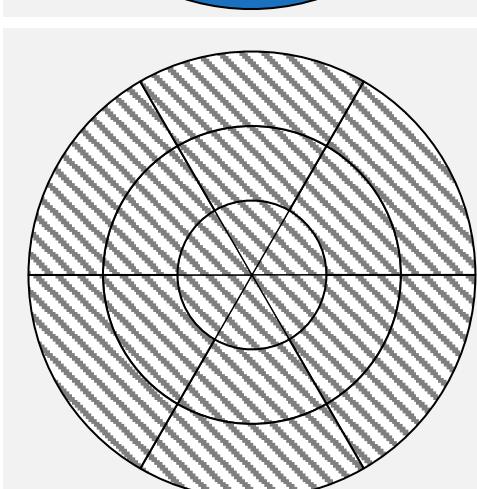
normal



pathological



not used



## T1 Mapping

Basal  $1313 \pm 70$  ms

Mid  $1307 \pm 56$  ms

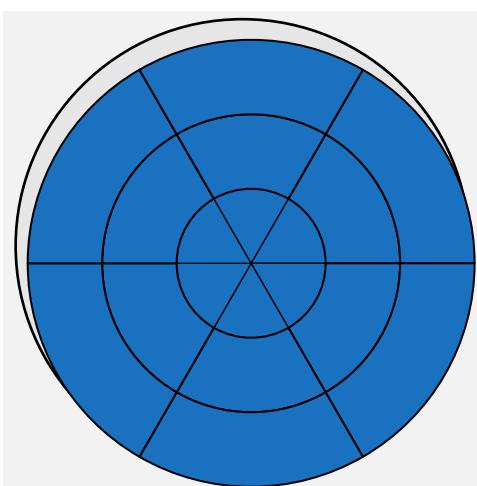
Apical  $1314 \pm 64$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



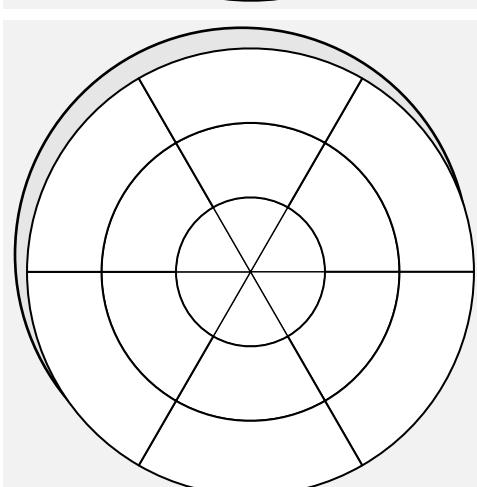
subendocardial

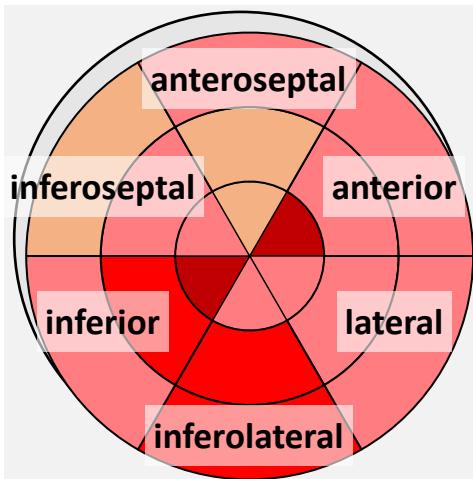


transmural



diffuse





### GLS

Basal  $-12.76 \pm 2.6\%$

> 0 %

Mid  $-13.17 \pm 3.6\%$

0 to -5.0 %

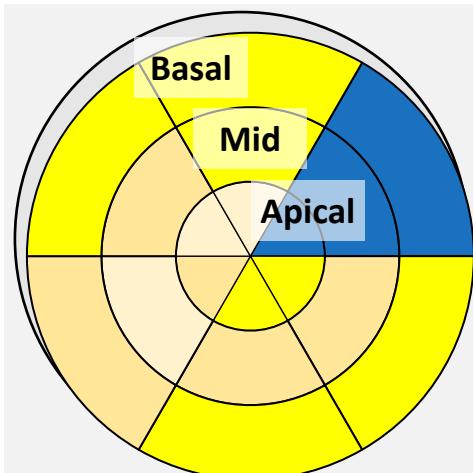
Apical  $-16.08 \pm 5.5\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %



### CS Epicard

Basal  $-11.49 \pm 9.6\%$

> 0 %

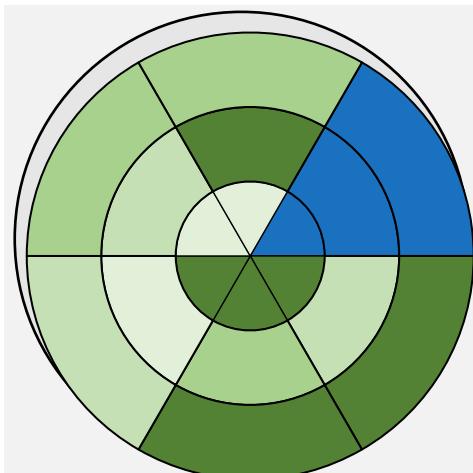
Mid  $-4 \pm 12.9\%$

0 to -5.0 %

Apical  $-5.99 \pm 17.5\%$

-5.1 to -13.3 %

< -13.3 %



### CS Endocard

Basal  $-19.5 \pm 11.6\%$

> 0 %

Mid  $-9.76 \pm 16.7\%$

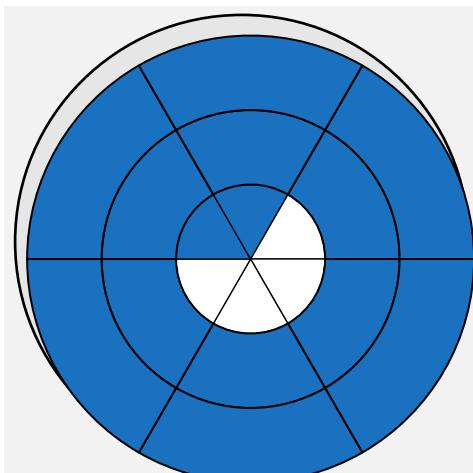
0 to -10.0 %

Apical  $-19 \pm 20.6\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %



### Radial

Basal  $31.76 \pm 3.9\%$

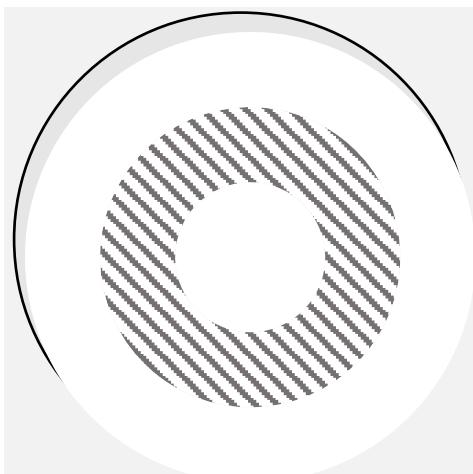
normal

Mid  $22.9 \pm 2.9\%$

pathological

Apical  $44.17 \pm 20.4\%$

> 44.2 %



### Rotation

Basal  $-4 \pm 2\%$

normal

Apical  $8.58 \pm 4.8\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

### T2STIR

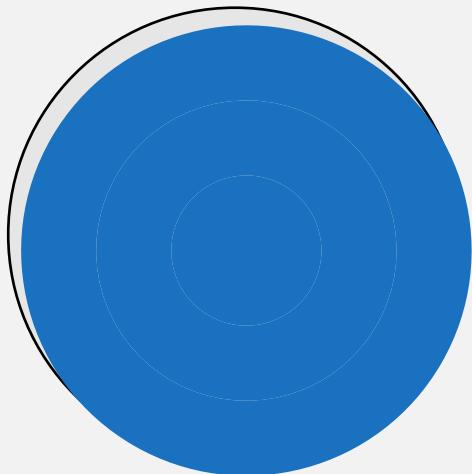
Caudal 3.6

Mid 3.65

Apical 3.91



normal  
pathological  
 $> 1.9$



### T2 Mapping

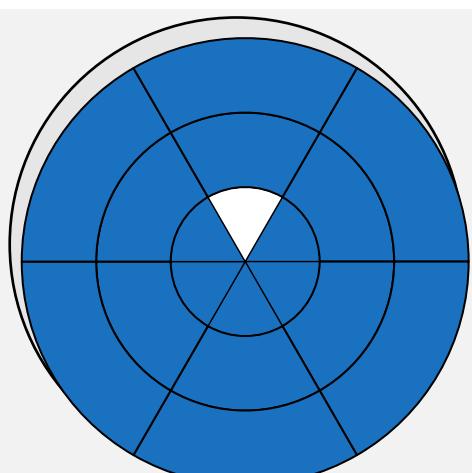
Basal  $59 \pm 10.2$  ms

Mid  $56.8 \pm 7.3$  ms

Apical  $50.5 \pm 9.1$  ms



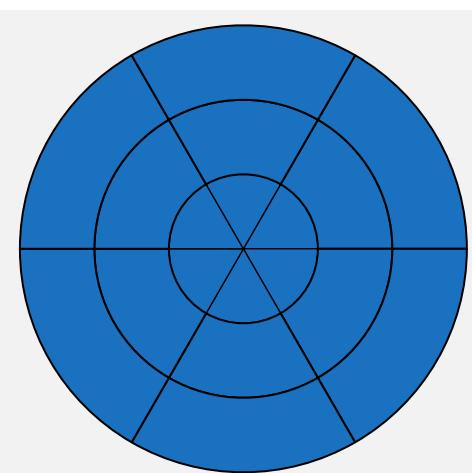
normal  
pathological  
 $> 45$  ms



### EGE



normal  
pathological



### T1 Mapping

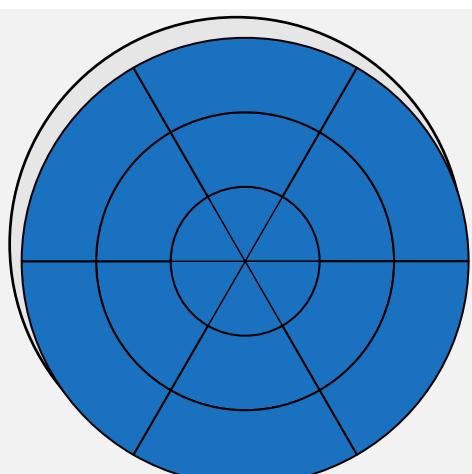
Basal  $1353 \pm 70$  ms

Mid  $1461 \pm 81$  ms

Apical  $1458 \pm 111$  ms



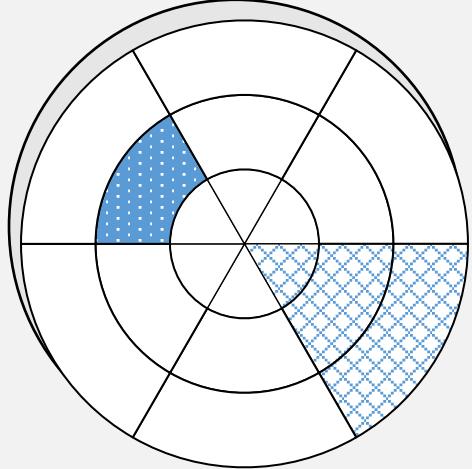
normal  
pathological  
 $> 1250$  ms



### LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-13.4 \pm 3.4\%$

> 0 %

Mid  $-15.4 \pm 3.2\%$

0 to -5.0 %

Apical  $-18.1 \pm 1.1\%$

-5.1 to -10.0 %

Basal  $-13.4 \pm 3.4\%$

-10.1 to -15.0 %

Mid  $-15.4 \pm 3.2\%$

-15.1 to 18.0 %

Apical  $-18.1 \pm 1.1\%$

< -18.0 %

### CS Epicard

Basal  $-11.7 \pm 5.8\%$

> 0 %

Mid  $-9.96 \pm 5.4\%$

0 to -5.0 %

Apical  $-15.56 \pm 2.8\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-27.67 \pm 6.2\%$

> 0 %

Mid  $-31.13 \pm 5.2\%$

0 to -10.0 %

Apical  $-26.98 \pm 3.5\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $57.63 \pm 5.8\%$

normal

Mid  $32.48 \pm 4.1\%$

pathological

Apical  $32.44 \pm 1.6\%$

> 44.2 %

### Rotation

Basal  $-2.0 \pm 2.5\%$

normal

Apical  $6.53 \pm 0.8\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

Caudal 2.25

Mid 1.45

Apical 2.9



normal  
pathological  
 $> 1.9$



## T2 Mapping

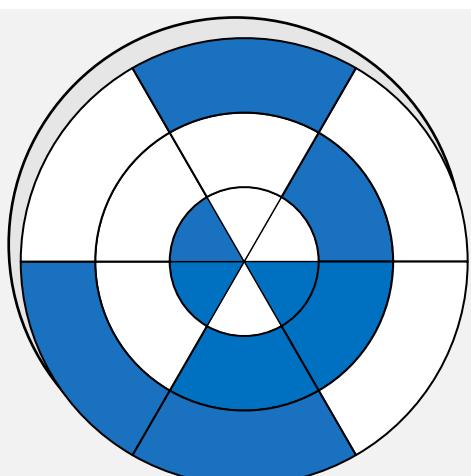
Basal  $44.7 \pm 6.5$  ms

Mid  $45.2 \pm 5.5$  ms

Apical  $45.1 \pm 4.3$  ms



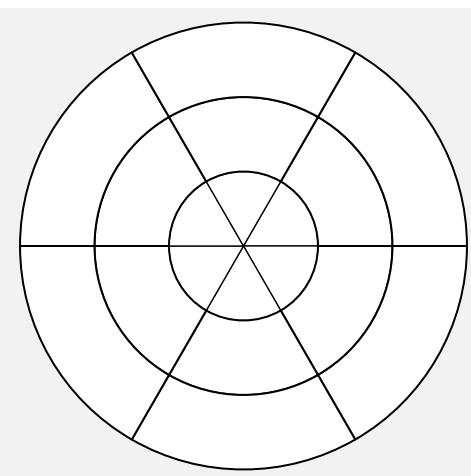
normal  
pathological  
 $> 45$  ms



## EGE



normal  
pathological



## T1 Mapping

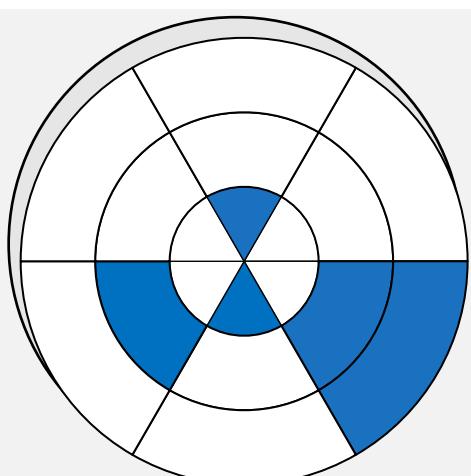
Basal  $1229 \pm 47$  ms

Mid  $1236 \pm 50$  ms

Apical  $1249 \pm 38$  ms



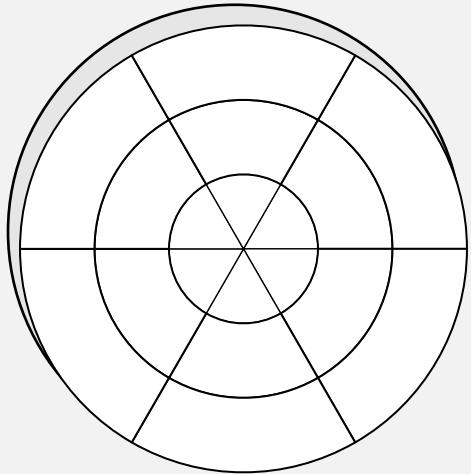
normal  
pathological  
 $> 1250$  ms



## LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-14.2 \pm 1.8\%$

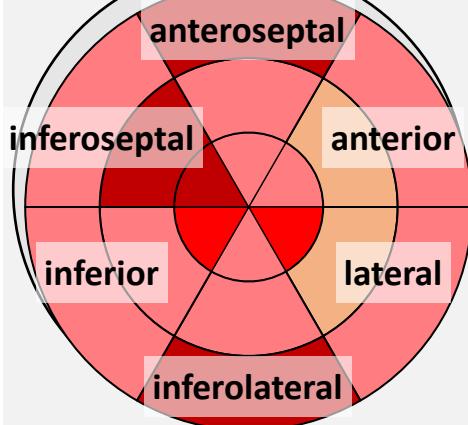
> 0 %

Mid  $-13.0 \pm 4.3\%$

0 to -5.0 %

Apical  $-15.7 \pm 5.0\%$

-5.1 to -10.0 %



### CS Epicard

Basal  $-14.9 \pm 4.9\%$

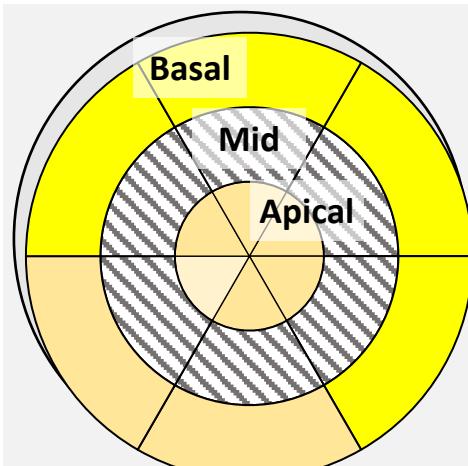
> 0 %

Mid not used

0 to -5.0 %

Apical  $-5.9 \pm 1.7\%$

-5.1 to -13.3 %



### CS Endocard

Basal  $-27.8 \pm 6.2\%$

> 0 %

Mid not used

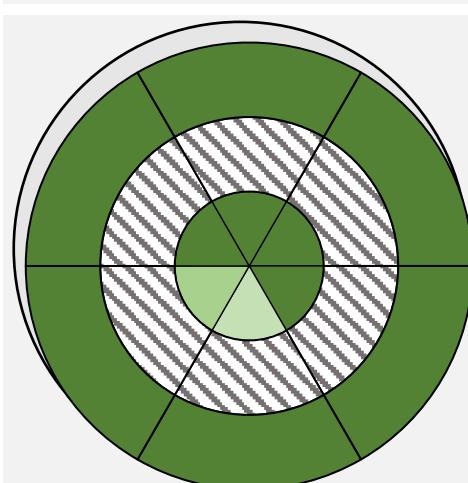
0 to -10.0 %

Apical  $-28.0 \pm 3.0\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %



### Radial

Basal  $40.5 \pm 4.7\%$

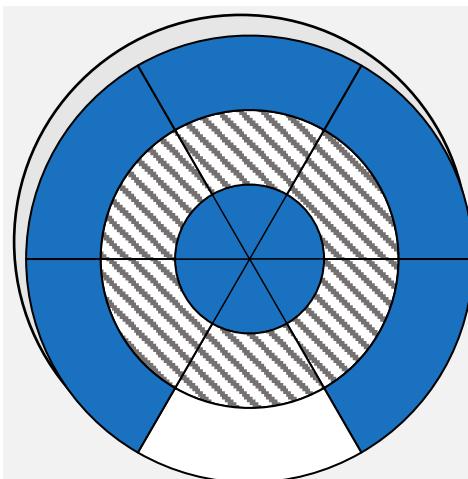
normal

Mid not used

pathological

Apical  $17.9 \pm 1.9\%$

> 44.2 %



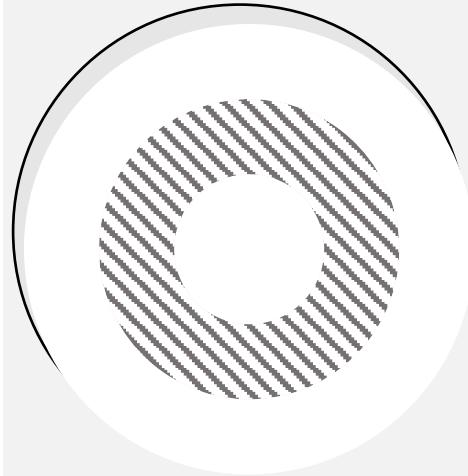
### Rotation

Basal  $-6.6 \pm 3.9\%$

normal

Apical  $3.0 \pm 0.4\%$

pathological  
basal < -3.0 %  
apical < 3.0 %



not used

## T2STIR

Caudal 2.8

Mid 2.4

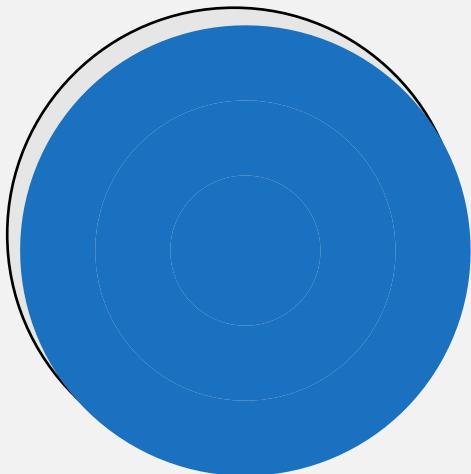
Apical 2.35



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal  $47.2 \pm 5.1$

Mid  $47.5 \pm 5.9$

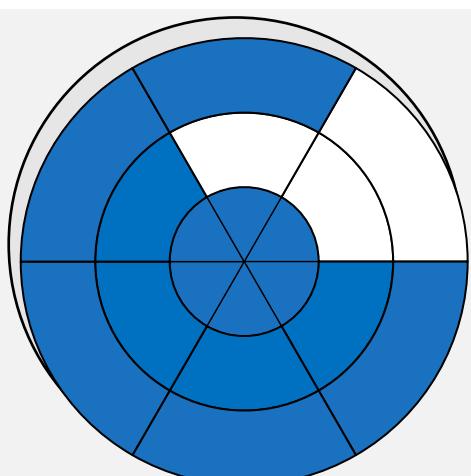
Apical  $53.5 \pm 5.3$



normal



pathological  
 $> 45$  ms



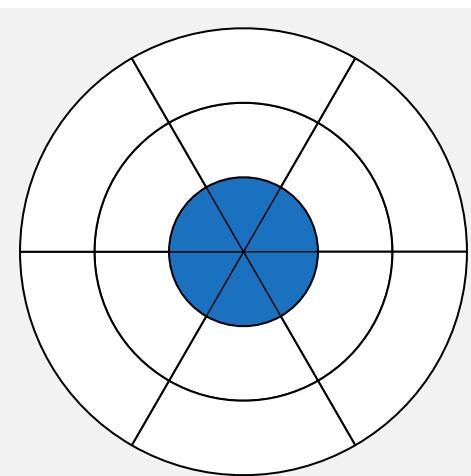
## EGE



normal



pathological



## T1 Mapping

Basal  $1356 \pm 183$

Mid  $1328 \pm 73$

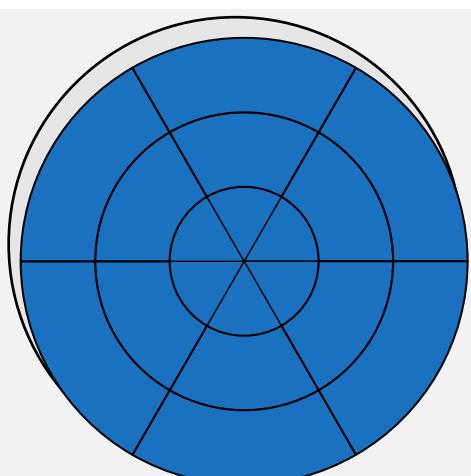
Apical  $1349 \pm 85$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



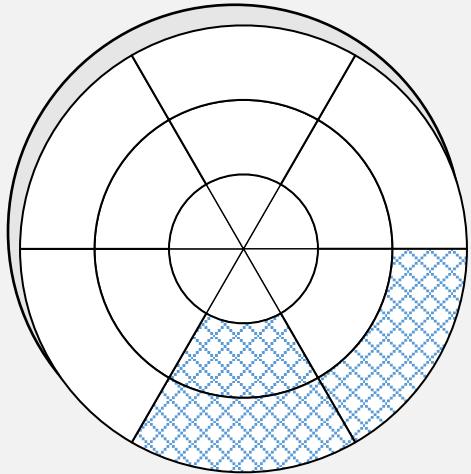
subendocardial



transmural



diffuse



### GLS

Basal  $-16.66 \pm 2.6\%$

> 0 %

Mid  $-18.83 \pm 3.4\%$

0 to -5.0 %

Apical  $-22.63 \pm 6.1\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %

### CS Epicard

Basal  $-16.78 \pm 9.3\%$

> 0 %

Mid  $-10.21 \pm 24.2\%$

0 to -5.0 %

Apical  $-14.28 \pm 8.5\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-34.43 \pm 9.2\%$

> 0 %

Mid  $-22.8 \pm 35.1\%$

0 to -10.0 %

Apical  $-39.5 \pm 5.3\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $46.42 \pm 1.5\%$

normal

Mid  $42.81 \pm 10.2\%$

pathological

Apical  $49.64 \pm 22\%$

> 44.2 %

### Rotation

Basal  $-7.56 \pm 4.1\%$

normal

Apical  $5.14 \pm 3.2\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

Caudal 1.68

Mid 2.24

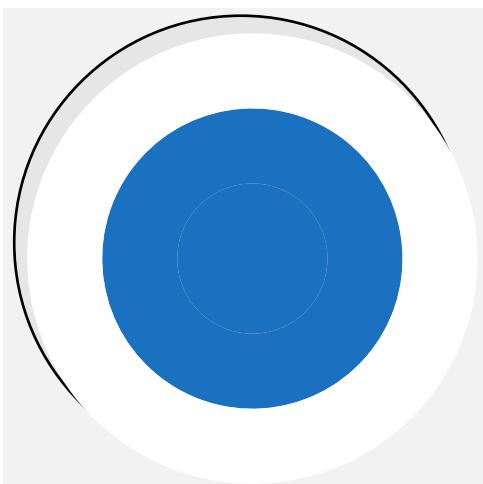
Apical 2.27



normal



pathological  
 $> 1.9$



## T2 Mapping

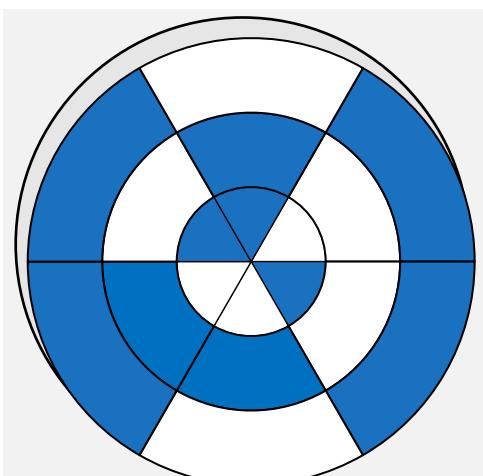
Basal  $49.0 \pm 13.0$

Mid  $43.6 \pm 6.1$

Apical  $43.7 \pm 4.4$



normal  
pathological  
 $> 45$  ms



## EGE



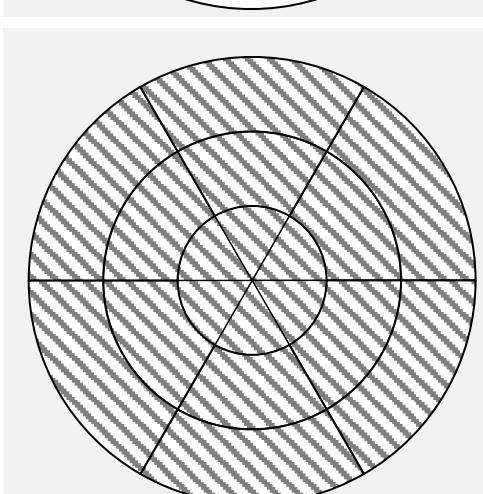
normal



pathological



not used



## T1 Mapping

Basal  $1248 \pm 63.5$

Mid  $1223 \pm 77$  ms

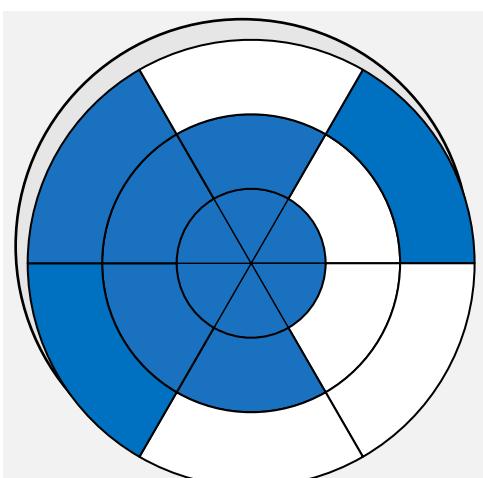
Apical  $1279 \pm 72$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



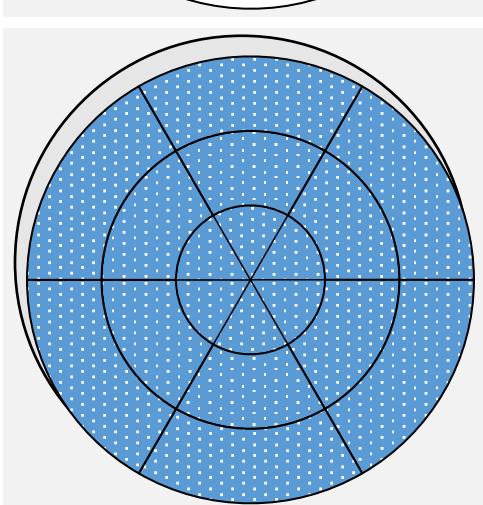
subendocardial



transmural



diffuse



### GLS

Basal  $-19.26 \pm 3.6\%$

> 0 %

Mid  $-21.95 \pm 3.0\%$

0 to -5.0 %

Apical  $-27.62 \pm 5.1\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %

### CS Epicard

Basal  $-13.89 \pm 10.5\%$

> 0 %

Mid  $-16.47 \pm 7.5\%$

0 to -5.0 %

Apical  $-13.75 \pm 5.8\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-33.22 \pm 10.5\%$

> 0 %

Mid  $-29.0 \pm 13.2\%$

0 to -10.0 %

Apical  $-37.82 \pm 7.7\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $44.83 \pm 2.0\%$

normal

Mid  $63.1 \pm 2.2\%$

pathological

Apical  $49.04 \pm 1.6\%$

> 44.2 %

### Rotation

Basal  $-6.47 \pm 3.6\%$

normal

Apical  $12.97 \pm 1.3\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

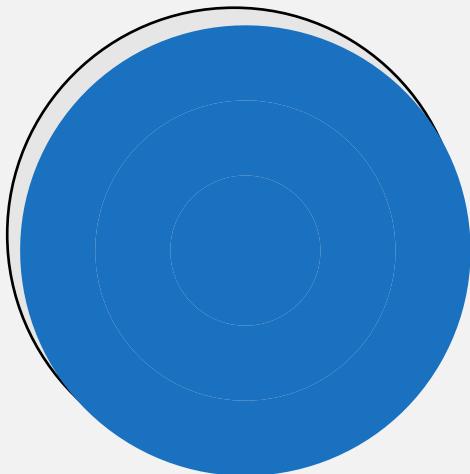
Caudal 3.0

Mid 3.69

Apical 3.7



normal  
pathological  
 $> 1.9$



## T2 Mapping

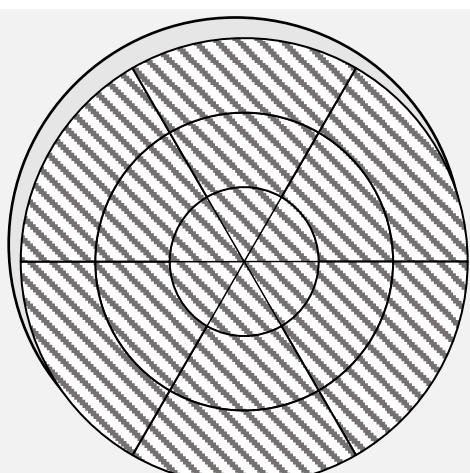
Basal not used

Mid not used

Apical not used



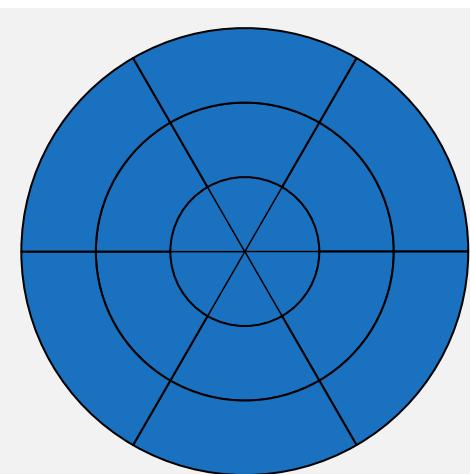
normal  
pathological  
 $> 45$  ms



## EGE



normal  
pathological



## T1 Mapping

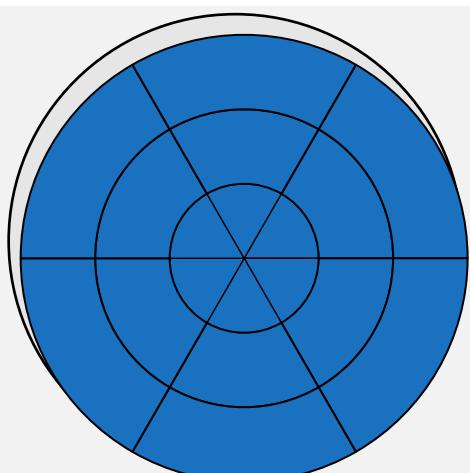
Basal  $1356 \pm 72$  ms

Mid  $1353 \pm 75$  ms

Apical  $1374 \pm 63.8$  ms



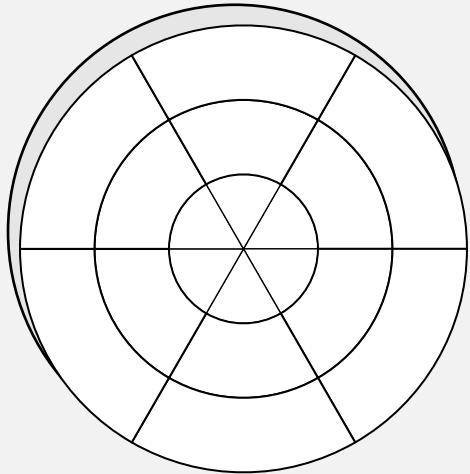
normal  
pathological  
 $> 1250$  ms



## LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-17.3 \pm 2.1\%$

> 0 %

Mid  $-16.2 \pm 5.7\%$

0 to -5.0 %

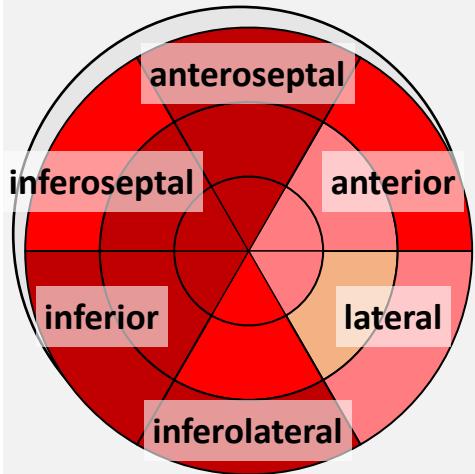
Apical  $-17.1 \pm 6.3\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %



### CS Epicard

Basal  $-17.0 \pm 6.5\%$

> 0 %

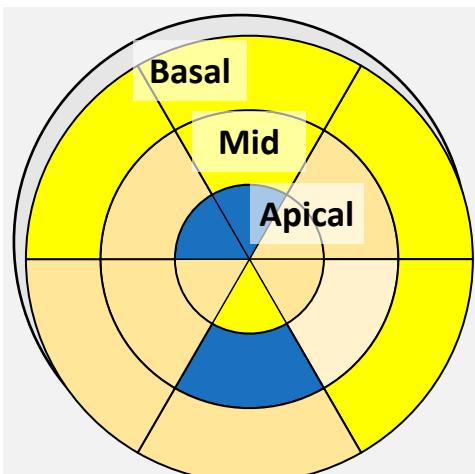
Mid  $-7.8 \pm 6.0\%$

0 to -5.0 %

Apical  $-5.5 \pm 9.6\%$

-5.1 to -13.3 %

< -13.3 %



### CS Endocard

Basal  $-25.8 \pm 5.4\%$

> 0 %

Mid  $-26.6 \pm 6.8\%$

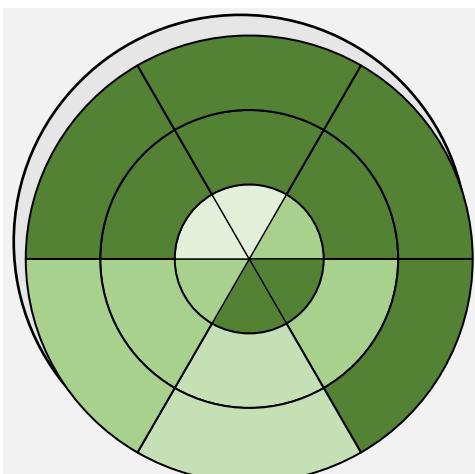
0 to -10.0 %

Apical  $-17.6 \pm 12.6\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %



### Radial

Basal  $18.6 \pm 2.5\%$

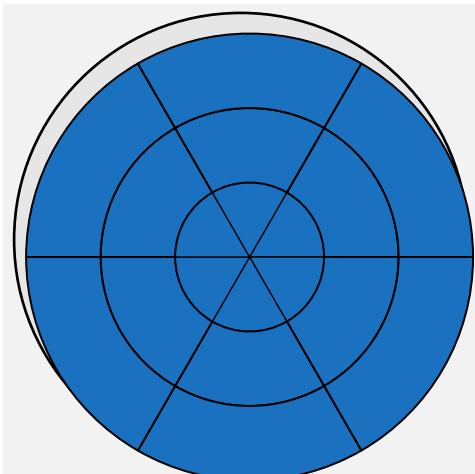
normal

Mid  $35.3 \pm 0.9\%$

pathological

Apical  $28.8 \pm 2.6\%$

> 44.2 %



### Rotation

Basal  $-8.5 \pm 2.0\%$

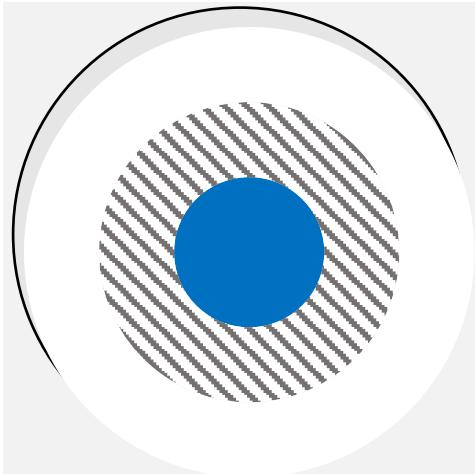
normal

Apical  $2.1 \pm 2.8\%$

pathological

basal < -3.0 %

apical < 3.0 %



not used

## T2STIR

Caudal 2.2

Mid 2.7

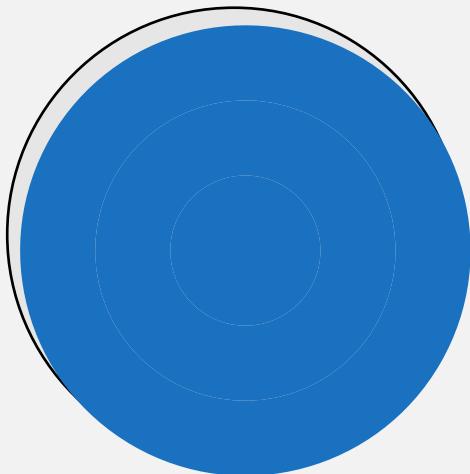
Apical 2.9



normal



pathological  
 $> 1.9$



## T2 Mapping

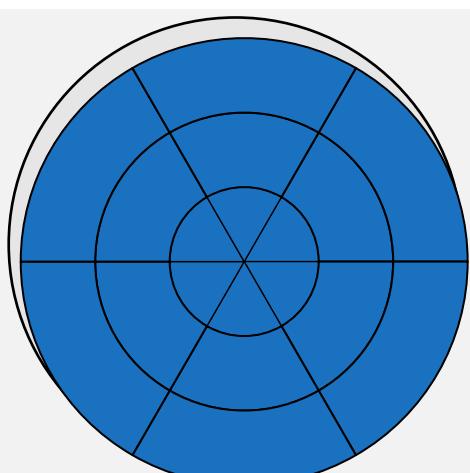
Basal  $51.7 \pm 8.4$  ms

Mid  $50.5 \pm 5.8$  ms

Apical  $54.4 \pm 6.1$  ms



normal  
pathological  
 $> 45$  ms



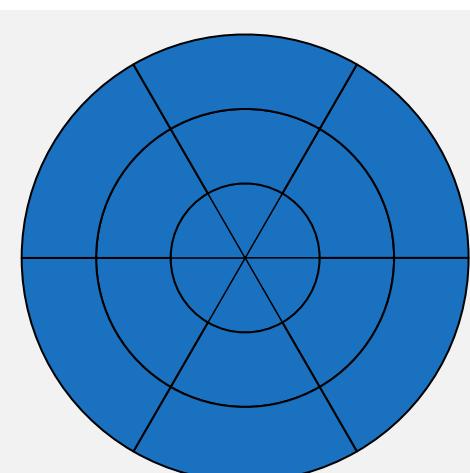
## EGE



normal



pathological



## T1 Mapping

Basal  $1374 \pm 66$  ms

Mid  $1387 \pm 97$  ms

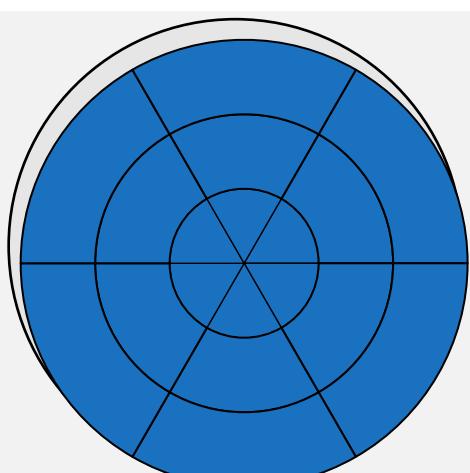
Apical  $1398 \pm 56$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



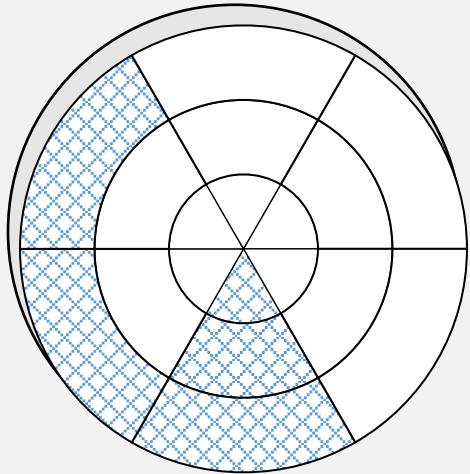
subendocardial



transmural



diffuse



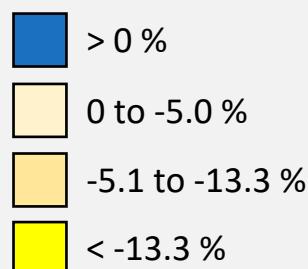
### GLS

Basal  $-21.98 \pm 5.3\%$   
Mid  $-25.05 \pm 5.1\%$   
Apical  $-32.69 \pm 10.1\%$



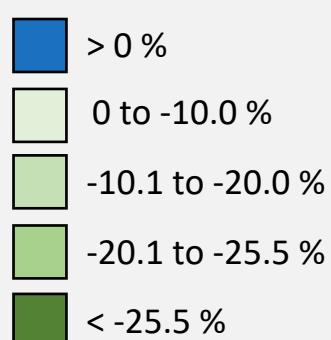
### CS Epicard

Basal  $-12.34 \pm 6.2\%$   
Mid  $-13.04 \pm 10\%$   
Apical  $-15.45 \pm 9.9\%$



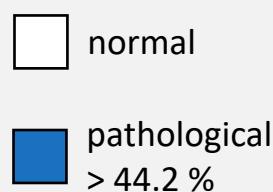
### CS Endocard

Basal  $-36.35 \pm 5.5\%$   
Mid  $-34.67 \pm 10.3\%$   
Apical  $-35.26 \pm 14.1\%$



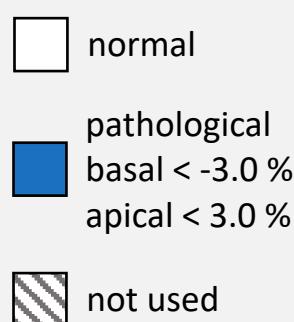
### Radial

Basal  $49.1 \pm 10.2\%$   
Mid  $45.95 \pm 10.7\%$   
Apical  $58.2 \pm 5.4\%$



### Rotation

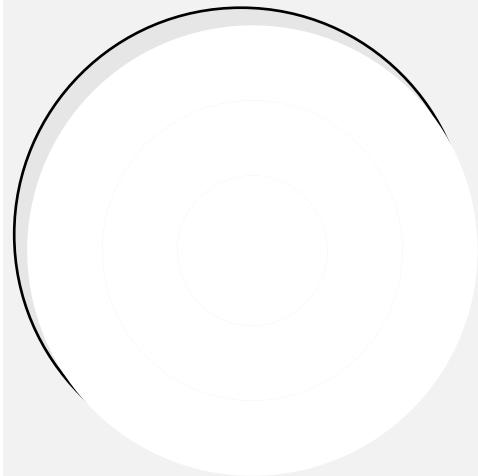
Basal  $-6.07 \pm 2.3\%$   
Apical  $5.79 \pm 4.4\%$



## T2STIR

Caudal 1  
Mid 1.2  
Apical 1.6

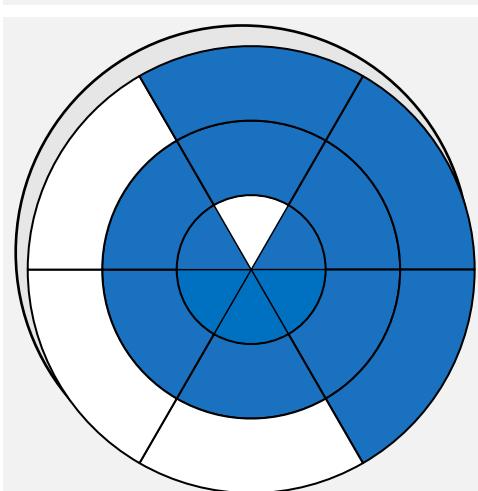
- normal
- pathological  
 $> 1.9$



## T2 Mapping

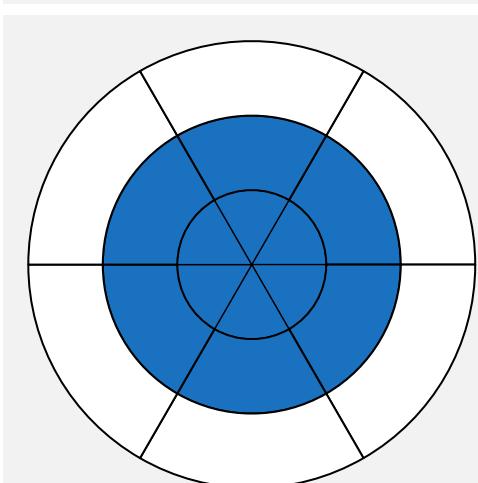
Basal  $47.4 \pm 62$  ms  
Mid  $53.1 \pm 7.7$  ms  
Apical  $50.1 \pm 10$  ms

- normal
- pathological  
 $> 45$  ms



## EGE

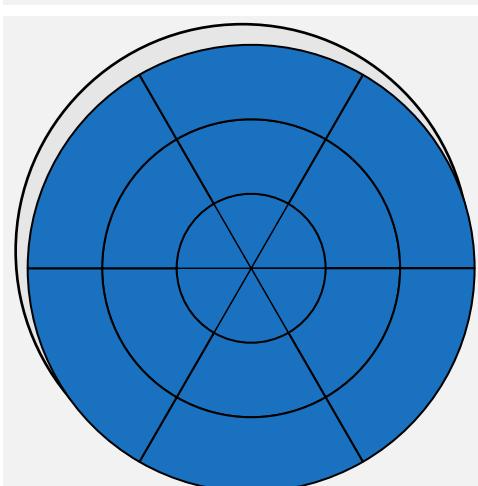
- normal
- pathological



## T1 Mapping

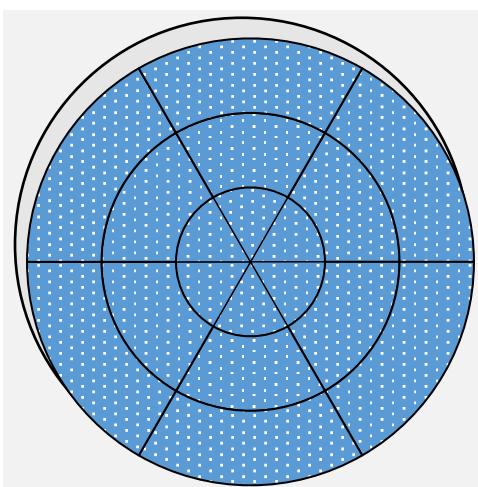
Basal  $1379 \pm 79$  ms  
Mid  $13320 \pm 68$  ms  
Apical  $1399 \pm 72$  ms

- normal
- pathological  
 $> 1250$  ms



## LGE

- normal
- subepicardial
- subendocardial
- transmural
- diffuse



### GLS

Basal  $-16.09 \pm 1.9\%$

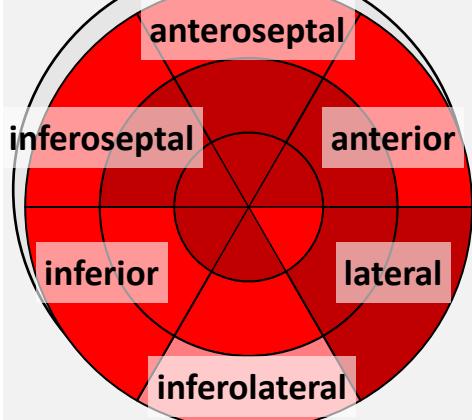
> 0 %

Mid  $-18.28 \pm 2.4\%$

0 to -5.0 %

Apical  $-21.15 \pm 3.1\%$

-5.1 to -10.0 %



### CS Epicard

Basal  $-14.63 \pm 11\%$

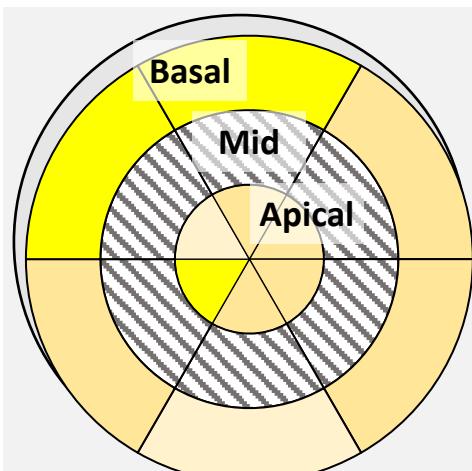
> 0 %

Mid not used

0 to -5.0 %

Apical  $-8.29 \pm 4\%$

-5.1 to -13.3 %



### CS Endocard

Basal  $-23.79 \pm 15\%$

> 0 %

Mid not used

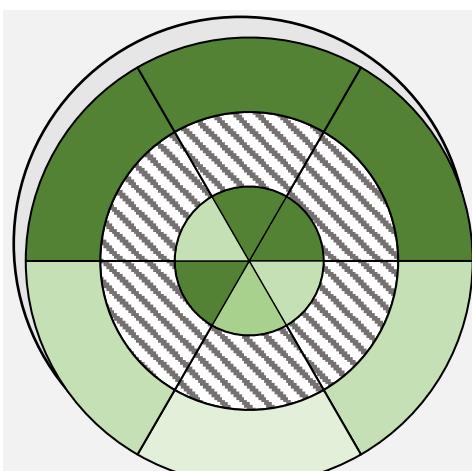
0 to -10.0 %

Apical  $-23.29 \pm 5.7\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %



### Radial

Basal  $22.1 \pm 4.1\%$

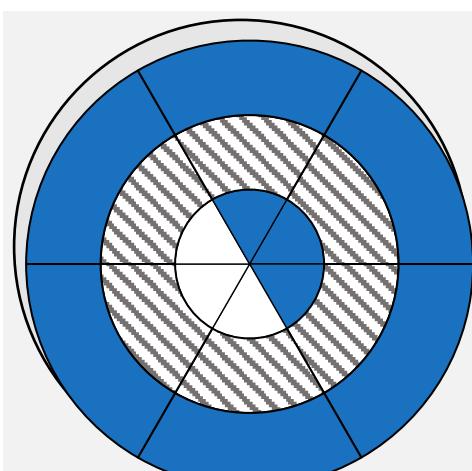
normal

Mid not used

pathological

Apical  $46.1 \pm 4\%$

> 44.2 %



### Rotation

Basal  $-7.84 \pm 4.9\%$

normal

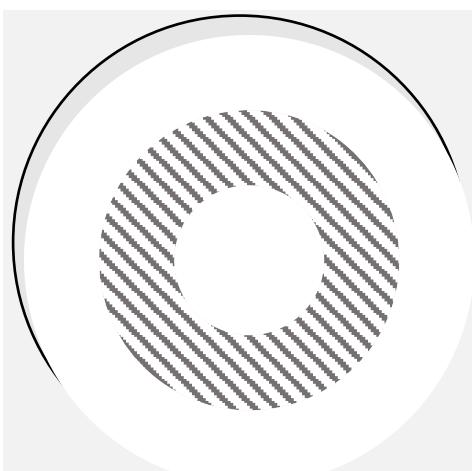
Apical  $8.11 \pm 1.4\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used



### T2STIR

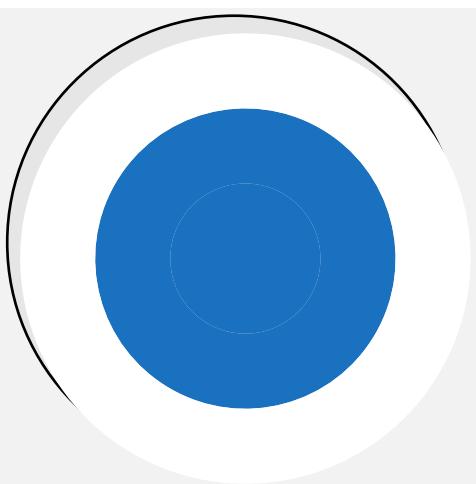
Caudal 1.4

Mid 3.7

Apical 3.2



normal  
pathological  
 $> 1.9$



### T2 Mapping

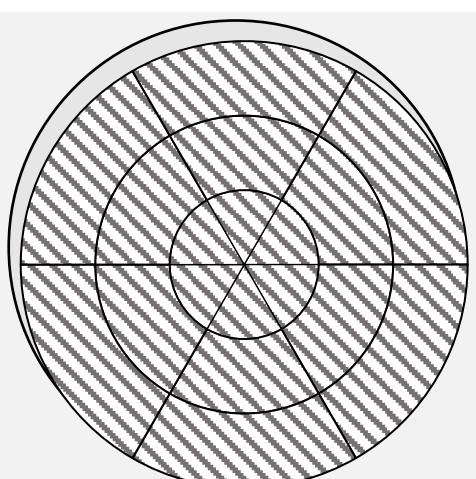
Basal not used

Mid not used

Apical not used



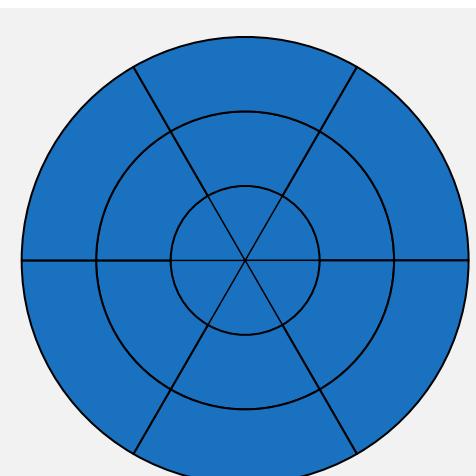
normal  
pathological  
 $> 45 \text{ ms}$



### EGE



normal  
pathological



### T1 Mapping

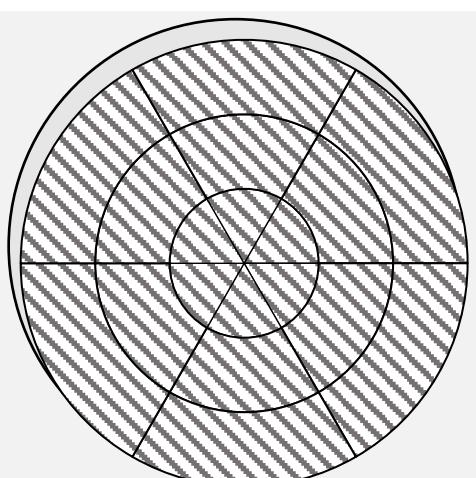
Basal not used

Mid not used

Apical not used



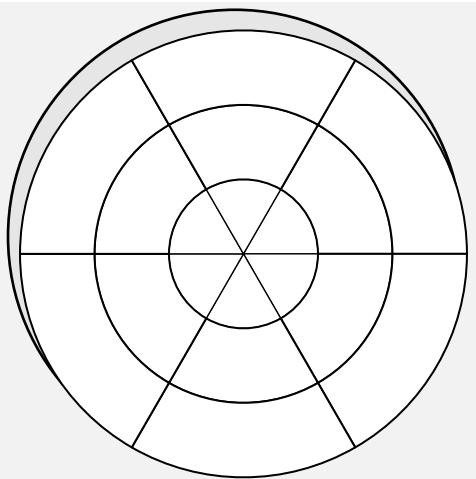
normal  
pathological  
 $> 1250 \text{ ms}$



### LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-13.37 \pm 13.2\%$

> 0 %

Mid  $-21.63 \pm 4.7\%$

0 to -5.0 %

Apical  $-31.39 \pm 3.9\%$

-5.1 to -10.0 %

Basal  $-13.37 \pm 13.2\%$

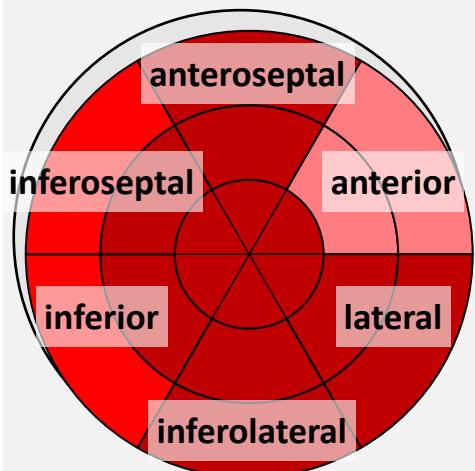
-10.1 to -15.0 %

Mid  $-21.63 \pm 4.7\%$

-15.1 to 18.0 %

Apical  $-31.39 \pm 3.9\%$

< -18.0 %



### CS Epicard

Basal  $-0.94 \pm 14.6\%$

> 0 %

Mid  $-8.39 \pm 13.4\%$

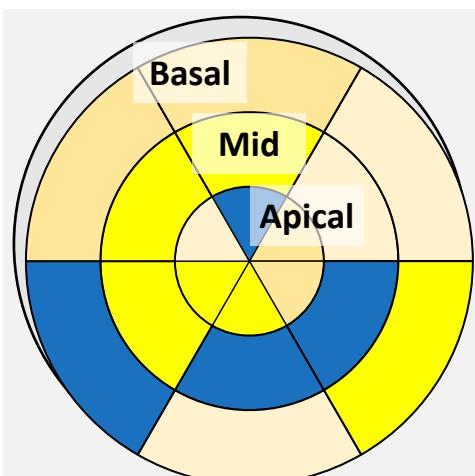
0 to -5.0 %

Apical  $-9.5 \pm 8.4\%$

-5.1 to -13.3 %

Basal  $-0.94 \pm 14.6\%$

< -13.3 %



### CS Endocard

Basal  $-9.57 \pm 20.4\%$

> 0 %

Mid  $-27.23 \pm 13.9\%$

0 to -10.0 %

Apical  $-22.77 \pm 6.9\%$

-10.1 to -20.0 %

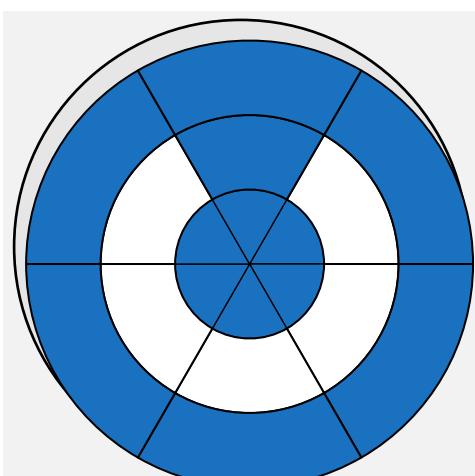
Basal  $-9.57 \pm 20.4\%$

-20.1 to -25.5 %

Mid  $-27.23 \pm 13.9\%$

< -25.5 %

Apical  $-22.77 \pm 6.9\%$



### Radial

Basal  $36.28 \pm 3.2\%$

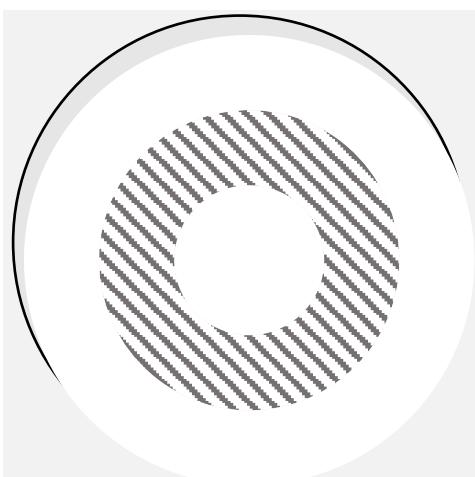
normal

Mid  $46.04 \pm 2.3\%$

pathological

Apical  $20.04 \pm 1.3\%$

> 44.2 %



### Rotation

Basal  $-5.7 \pm 3.8\%$

normal

Apical  $6.41 \pm 1.3\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

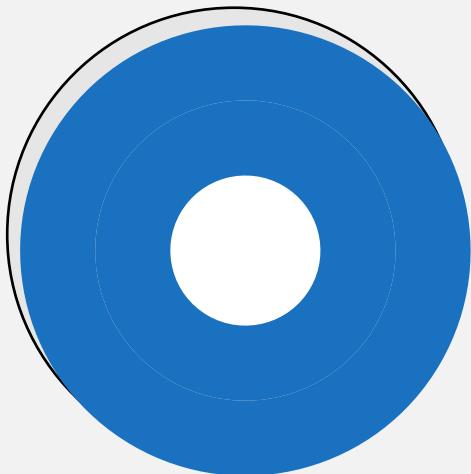
Caudal 2.3

Mid 2.74

Apical 1.78



normal  
pathological  
 $> 1.9$



## T2 Mapping

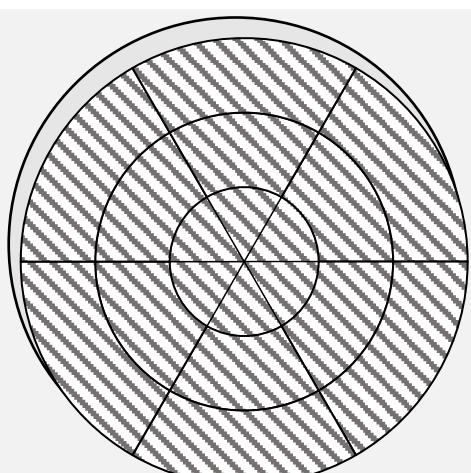
Basal not used

Mid not used

Apical not used



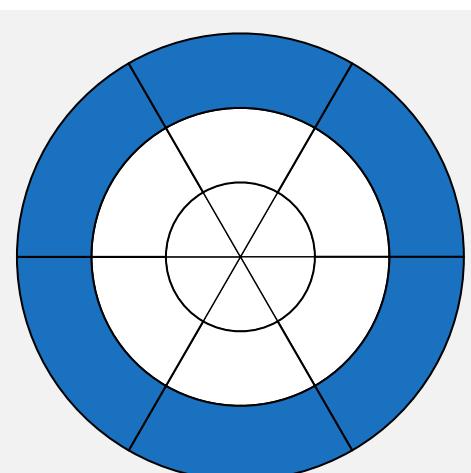
normal  
pathological  
 $> 45$  ms



## EGE



normal  
pathological



## T1 Mapping

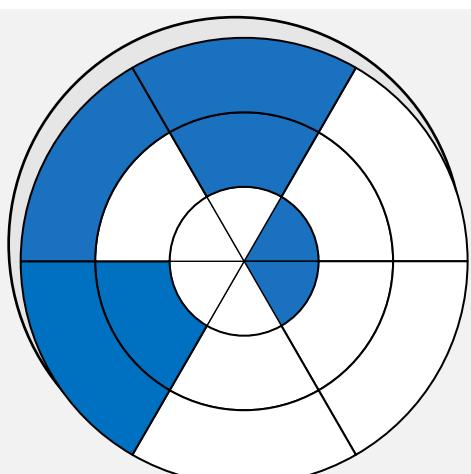
Basal  $1224 \pm 106$  ms

Mid  $1252 \pm 75$  ms

Apical  $1256 \pm 65$  ms



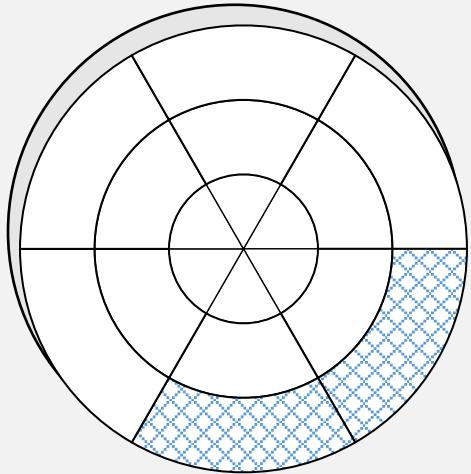
normal  
pathological  
 $> 1250$  ms



## LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-16.46 \pm 5.1\%$

> 0 %

Mid  $-17.59 \pm 2.9\%$

0 to -5.0 %

Apical  $-15.45 \pm 3.3\%$

-5.1 to -10.0 %

Basal  $-16.46 \pm 5.1\%$

-10.1 to -15.0 %

Mid  $-17.59 \pm 2.9\%$

-15.1 to 18.0 %

Apical  $-15.45 \pm 3.3\%$

< -18.0 %

### CS Epicard

Basal  $-7.3 \pm 17.8\%$

> 0 %

Mid not used

0 to -5.0 %

Apical  $-7.88 \pm 6.6\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-21.92 \pm 19.0\%$

> 0 %

Mid not used

0 to -10.0 %

Apical  $-22.34 \pm 7.1\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $50.77 \pm 11.6\%$

normal

Mid not used

pathological

Apical  $63.0 \pm 2.1\%$

> 44.2 %

### Rotation

Basal  $-5.55 \pm 6.9\%$

normal

Apical  $4.46 \pm 2.0\%$

pathological  
basal < -3.0 %  
apical < 3.0 %

not used

## T2STIR

Caudal 2.33

Mid 2.27

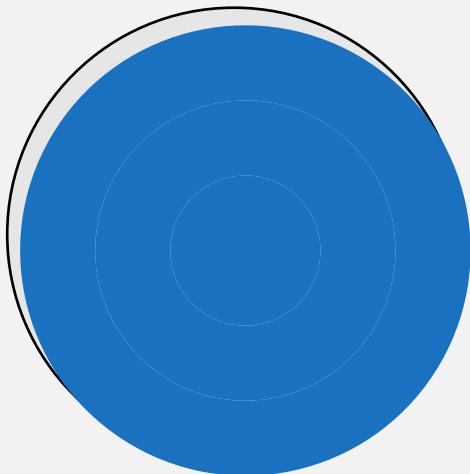
Apical 2.13



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal  $49.1 \pm 10.0$  ms

Mid  $46.6 \pm 6.9$  ms

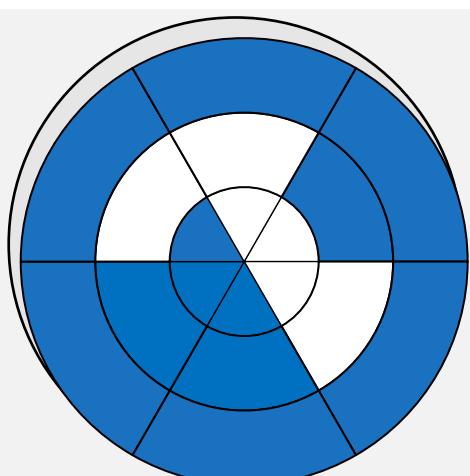
Apical  $47.2 \pm 7.2$  ms



normal



pathological  
 $> 45$  ms



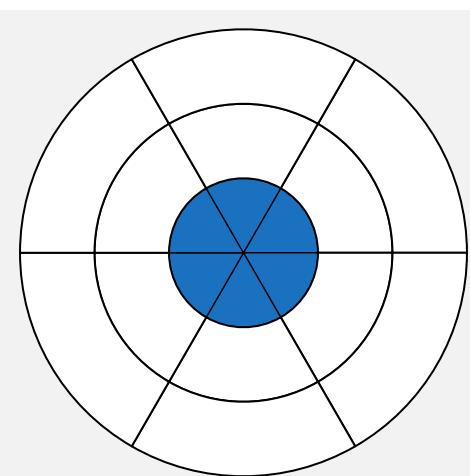
## EGE



normal



pathological



## T1 Mapping

Basal  $1258 \pm 54.0$  ms

Mid  $1266 \pm 61.0$  ms

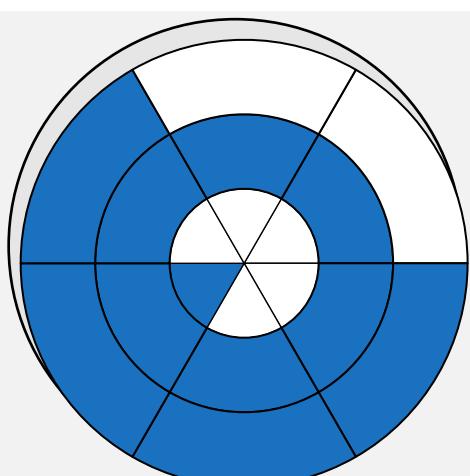
Apical  $1245 \pm 64$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



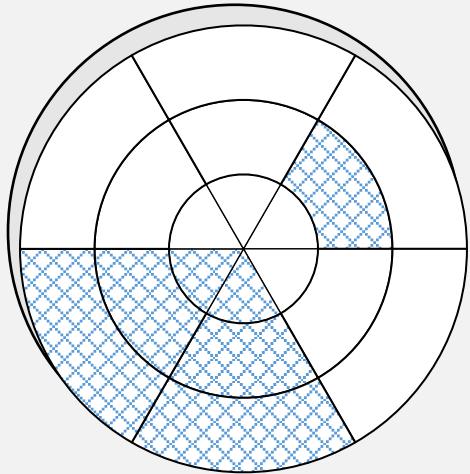
subendocardial



transmural



diffuse



### GLS

Basal  $-12.7 \pm 2.1\%$

> 0 %

Mid  $-12.62 \pm 2.8\%$

0 to -5.0 %

Apical  $-13.0 \pm 2.9\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %

### CS Epicard

Basal  $-5.52 \pm 9.5\%$

> 0 %

Mid not used

0 to -5.0 %

Apical  $-8.2 \pm 12.6\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-18.15 \pm 15.2\%$

> 0 %

Mid not used

0 to -10.0 %

Apical  $-29.13 \pm 8.8\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $25.66 \pm 3.2\%$

normal

Mid not used

pathological

Apical  $75.61 \pm 4.9\%$

> 44.2 %

### Rotation

Basal  $-6.42 \pm 1.6\%$

normal

Apical  $2.86 \pm 3.2\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

Caudal 2.77

Mid 2.39

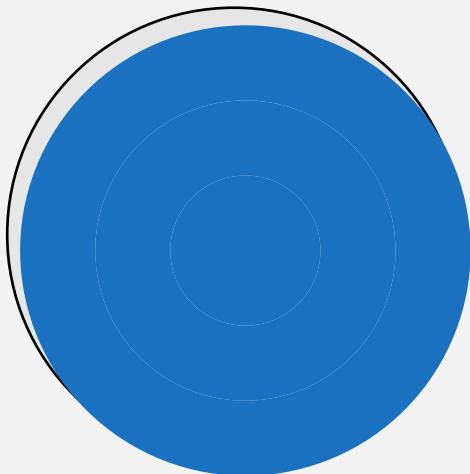
Apical 2.24



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal  $51.7 \pm 7.8$  ms

Mid  $47.4 \pm 5.3$  ms

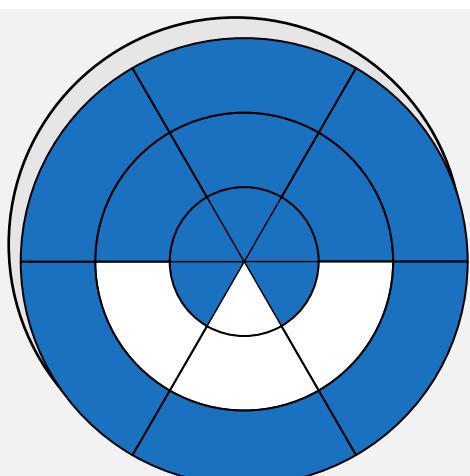
Apical  $48.6 \pm 5.4$  ms



normal



pathological  
 $> 45$  ms



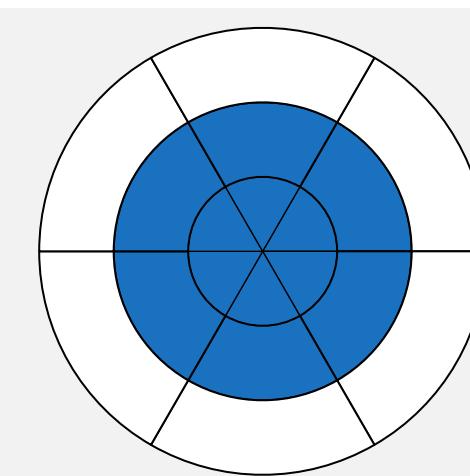
## EGE



normal



pathological



## T1 Mapping

Basal  $1266 \pm 52.0$  ms

Mid  $1255 \pm 50.0$  ms

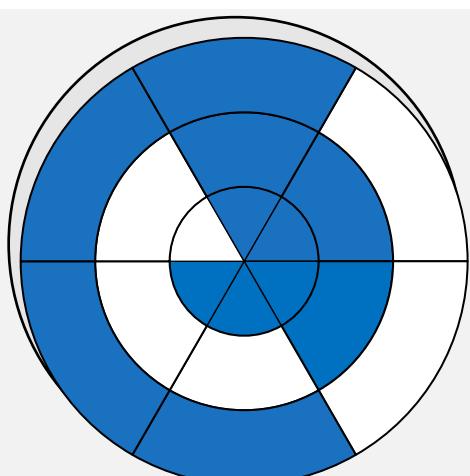
Apical  $1277 \pm 46.0$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



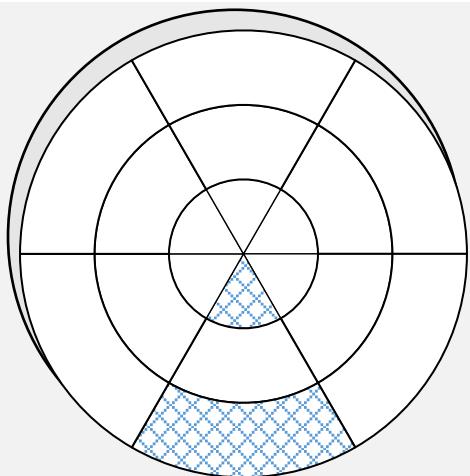
subendocardial



transmural



diffuse



### GLS

Basal  $-19.29 \pm 2.7\%$

> 0 %

Mid  $-20.7 \pm 4.1\%$

0 to -5.0 %

Apical  $-22.68 \pm 6.1\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %

### CS Epicard

Basal  $-4.27 \pm 3.6\%$

> 0 %

Basal

Mid not used

0 to -5.0 %

Mid

Apical  $-5.79 \pm 11.1\%$

-5.1 to -13.3 %

Apical

< -13.3 %

### CS Endocard

Basal  $-23.28 \pm 3.8\%$

> 0 %

Mid not used

0 to -10.0 %

Apical  $-20.11 \pm 12.7\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $50.24 \pm 1.7\%$

normal

Mid not used

pathological

Apical  $35.99 \pm 3\%$

> 44.2 %

### Rotation

Basal  $-0.53 \pm 2.2\%$

normal

Apical  $4.29 \pm 4.3\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

Caudal 3.2

Mid 6.0

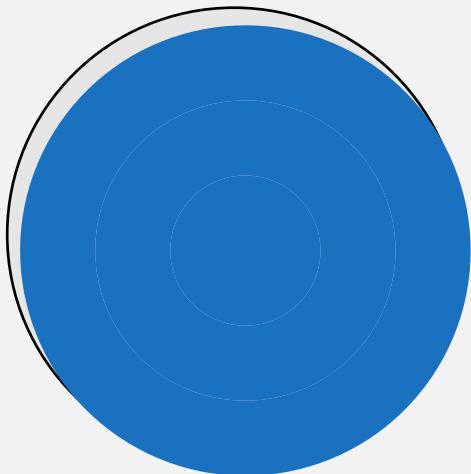
Apical 5.5



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal not used

Mid not used

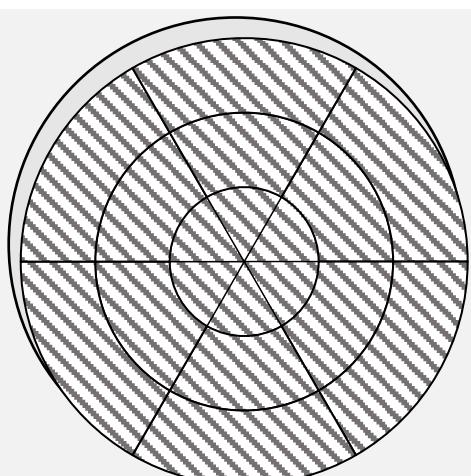
Apical not used



normal



pathological  
 $> 45$  ms



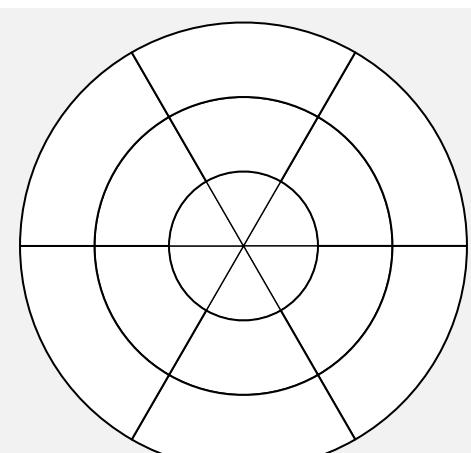
## EGE



normal



pathological



## T1 Mapping

Basal  $1302 \pm 119.0$  ms

Mid  $1286 \pm 99$  ms

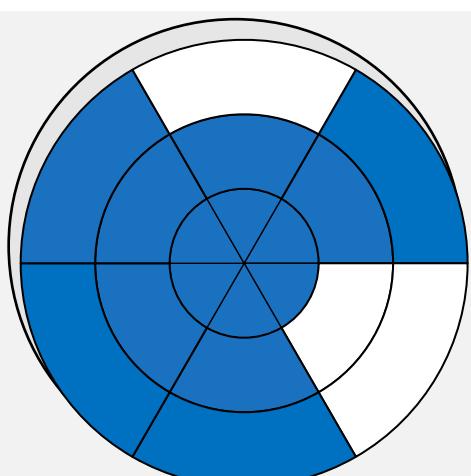
Apical  $1373 \pm 123$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



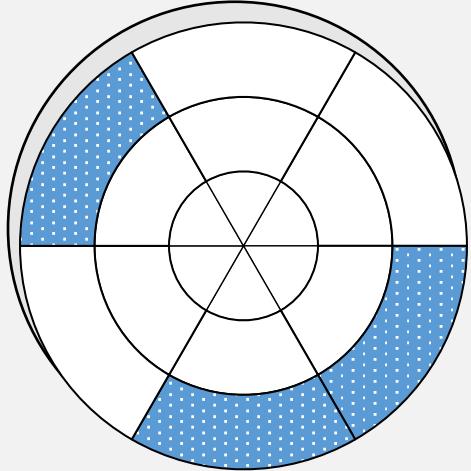
subendocardial



transmural



diffuse



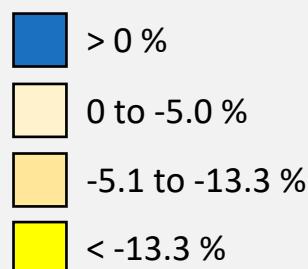
### GLS

Basal  $-15.4 \pm 4.4\%$   
Mid  $-15.4 \pm 3.5\%$   
Apical  $-17.73 \pm 3.2\%$



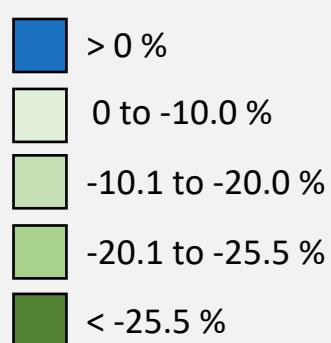
### CS Epicard

Basal  $-9.12 \pm 2.4\%$   
Mid not used  
Apical  $-2.32 \pm 1.4\%$



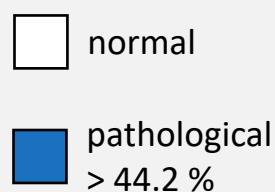
### CS Endocard

Basal  $-25 \pm 2.4\%$   
Mid not used  
Apical  $-21.9 \pm 1.9\%$



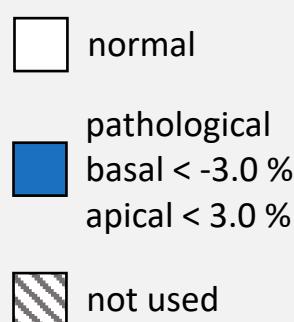
### Radial

Basal  $30.0 \pm 6.9\%$   
Mid not used  
Apical  $13.13 \pm 1.5\%$



### Rotation

Basal  $-3.97 \pm 0.5\%$   
Apical  $2.49 \pm 1.6\%$



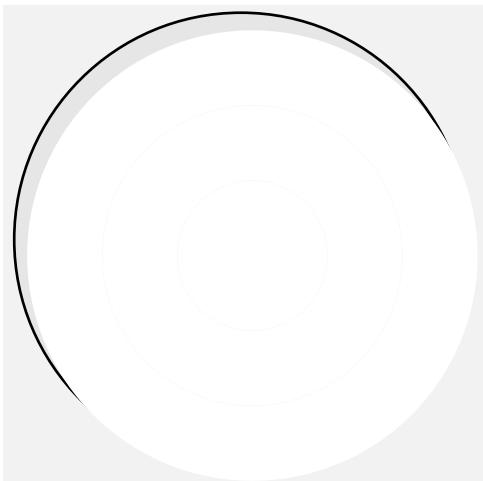
## T2STIR

Caudal 1.05

- normal
- pathological  
 $> 1.9$

Mid 1.22

Apical 1.8



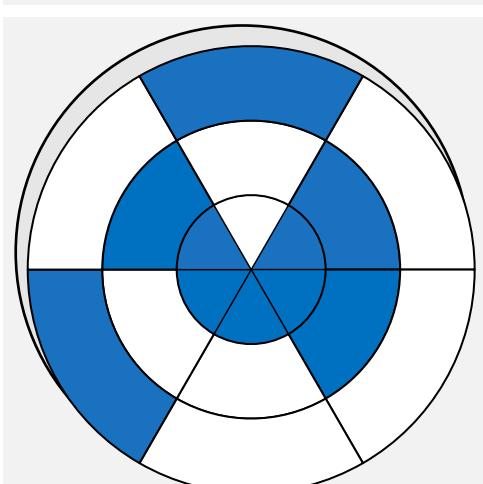
## T2 Mapping

Basal  $42.0 \pm 6.9$  ms

- normal
- pathological  
 $> 45$  ms

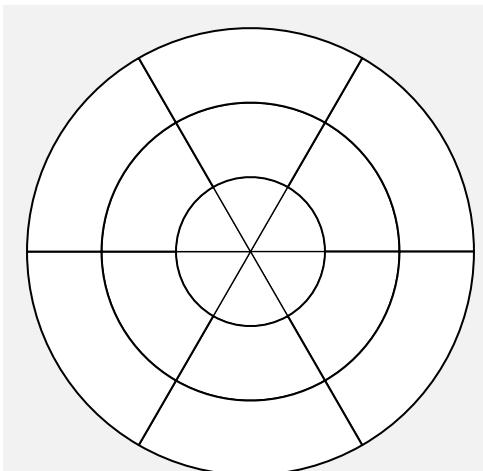
Mid  $46.3 \pm 7.6$  ms

Apical  $50.0 \pm 8.1$  ms



## EGE

- normal
- pathological



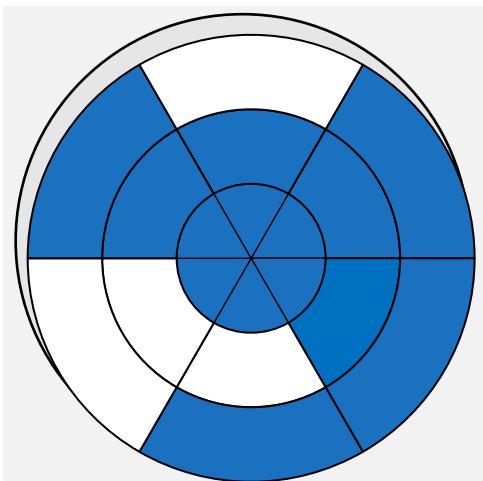
## T1 Mapping

Basal  $1267 \pm 78.0$  ms

- normal
- pathological  
 $> 1250$  ms

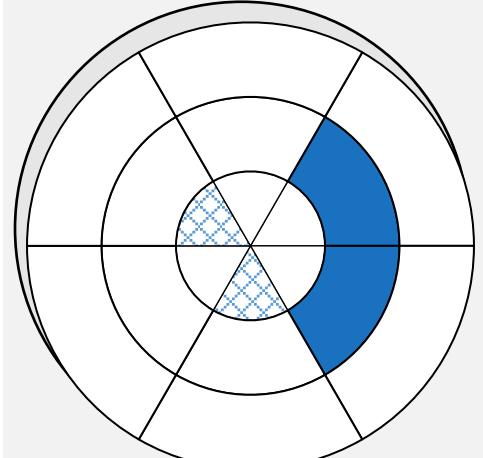
Mid  $1266 \pm 69.0$  ms

Apical  $1377 \pm 109.0$  ms



## LGE

- normal
- subepicardial
- subendocardial
- transmural
- diffuse



### GLS

Basal  $-16.15 \pm 3.2\%$

> 0 %

Mid  $-17.85 \pm 2.2\%$

0 to -5.0 %

Apical  $-21.11 \pm 2.5\%$

-5.1 to -10.0 %

Basal  $-16.15 \pm 3.2\%$

-10.1 to -15.0 %

Mid  $-17.85 \pm 2.2\%$

-15.1 to 18.0 %

Apical  $-21.11 \pm 2.5\%$

< -18.0 %

### CS Epicard

Basal  $-10.47 \pm 8.7\%$

> 0 %

Mid  $-8.24 \pm 4.9\%$

0 to -5.0 %

Apical  $-9.81 \pm 5.8\%$

-5.1 to -13.3 %

Basal  $-10.47 \pm 8.7\%$

< -13.3 %

### CS Endocard

Basal  $-30.1 \pm 9.0\%$

> 0 %

Mid  $-33.19 \pm 4.8\%$

0 to -10.0 %

Apical  $-35.06 \pm 7.6\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $49.8 \pm 3.4\%$

normal

Mid  $75.85 \pm 5.6\%$

pathological

Apical  $87.84 \pm 6.9\%$

> 44.2 %

### Rotation

Basal  $-4.85 \pm 1.2\%$

normal

Apical  $15.39 \pm 3.5\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

Caudal 2.16

Mid 2.7

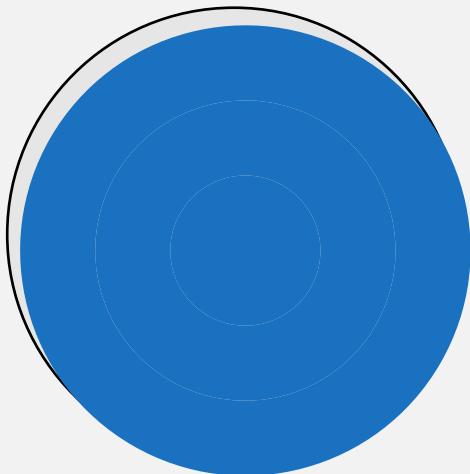
Apical 2.9



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal  $51.7 \pm 8.4$  ms

Mid  $50.5 \pm 5.8$  ms

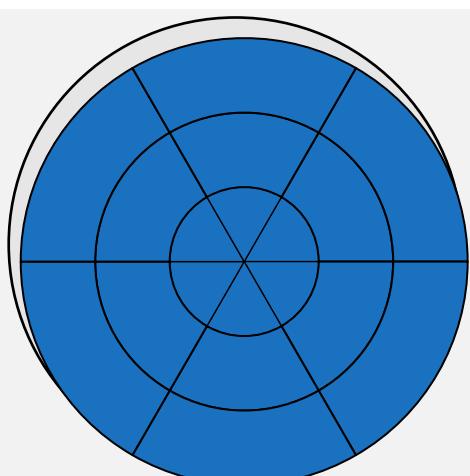
Apical  $54.4 \pm 6.1$  ms



normal



pathological  
 $> 45$  ms



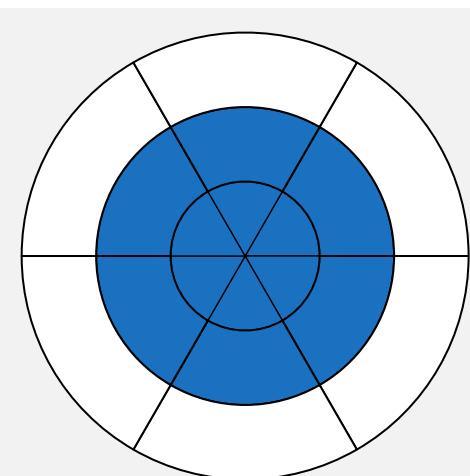
## EGE



normal



pathological



## T1 Mapping

Basal  $1374 \pm 66.0$  ms

Mid  $1387 \pm 97.0$  ms

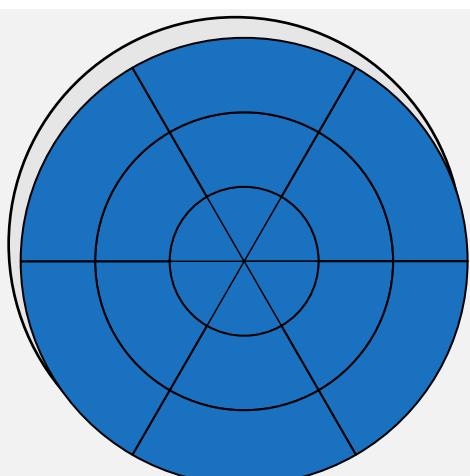
Apical  $1398 \pm 56.0$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



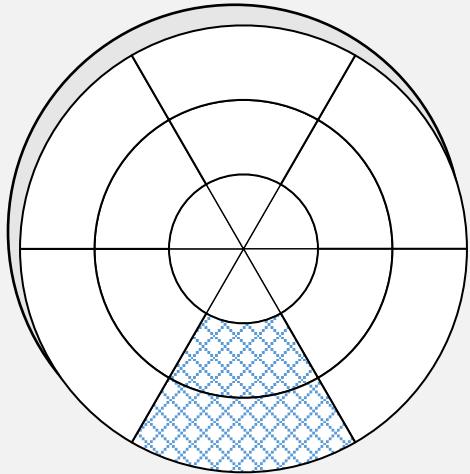
subendocardial



transmural



diffuse



### GLS

Basal  $-18.65 \pm 4.4\%$

> 0 %

Mid  $-18.4 \pm 4.5\%$

0 to -5.0 %

Apical  $-19.9 \pm 6.7\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %

### CS Epicard

Basal  $-11.22 \pm 11.5\%$

> 0 %

Mid  $-21.53 \pm 10.2\%$

0 to -5.0 %

Apical  $-12.03 \pm 10.6\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-36.5 \pm 10.8\%$

> 0 %

Mid  $-35.6 \pm 12.5\%$

0 to -10.0 %

Apical  $-23.7 \pm 18.4\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $61.7 \pm 21.4\%$

normal

Mid  $39.79 \pm 10.0\%$

pathological

Apical  $32.91 \pm 7.2\%$

> 44.2 %

### Rotation

Basal  $-7.54 \pm 4.6\%$

normal

Apical  $4.88 \pm 3.3\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

### T2STIR

Caudal 2.9

Mid 2.65

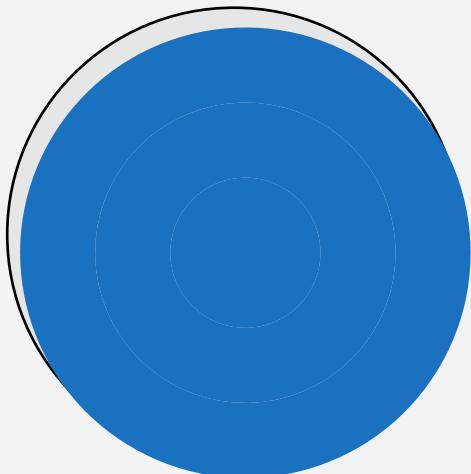
Apical 2.55



normal



pathological  
 $> 1.9$



### T2 Mapping

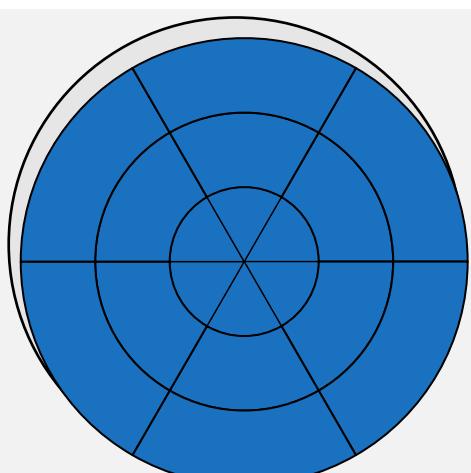
Basal  $59.4 \pm 11.0$  ms

Mid  $59.9 \pm 8.5$  ms

Apical  $54.7 \pm 6.8$  ms



normal  
pathological  
 $> 45$  ms



### EGE



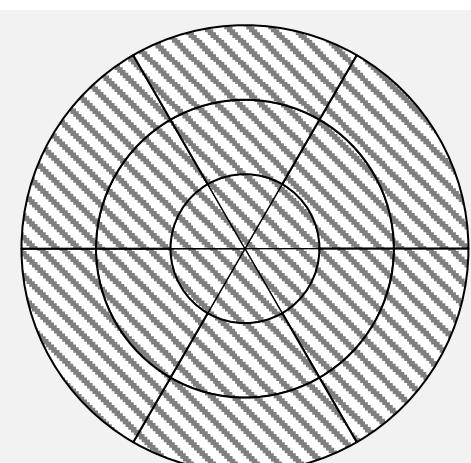
normal



pathological



not used



### T1 Mapping

Basal  $1476 \pm 115$  ms

Mid  $1464 \pm 127$  ms

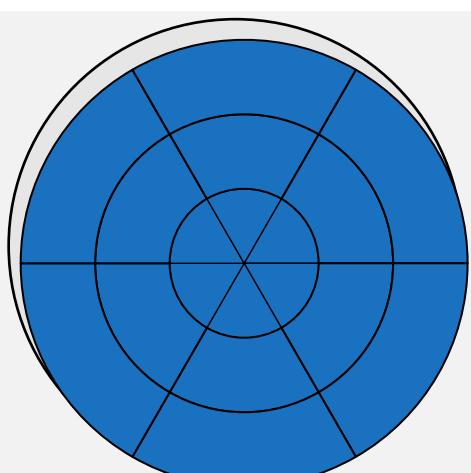
Apical  $1455 \pm 90.0$  ms



normal



pathological  
 $> 1250$  ms



### LGE



normal



subepicardial



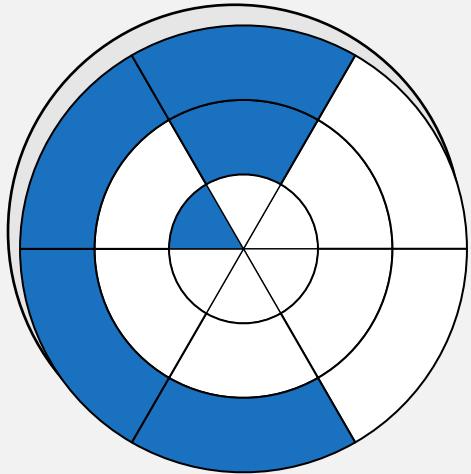
subendocardial



transmural



diffuse

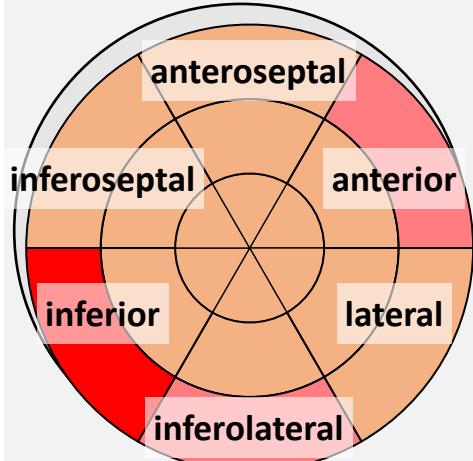


### GLS

Basal  $-10.4 \pm 3.5\%$

Mid  $-7.9 \pm 1.3\%$

Apical  $-7.1 \pm 1.4\%$



> 0 %

0 to -5.0 %

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

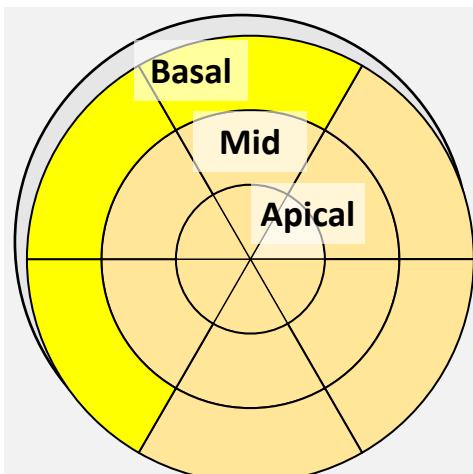
< -18.0 %

### CS Epicard

Basal  $-13.1 \pm 5.1\%$

Mid  $-7.5 \pm 2.6\%$

Apical  $-6.2 \pm 1.5\%$



> 0 %

0 to -5.0 %

-5.1 to -13.3 %

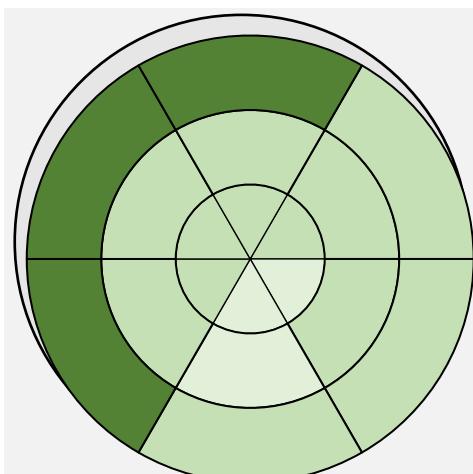
< -13.3 %

### CS Endocard

Basal  $-22.2 \pm 8.5\%$

Mid  $-11.7 \pm 2.3\%$

Apical  $-10.9 \pm 3.4\%$



> 0 %

0 to -10.0 %

-10.1 to -20.0 %

-20.1 to -25.5 %

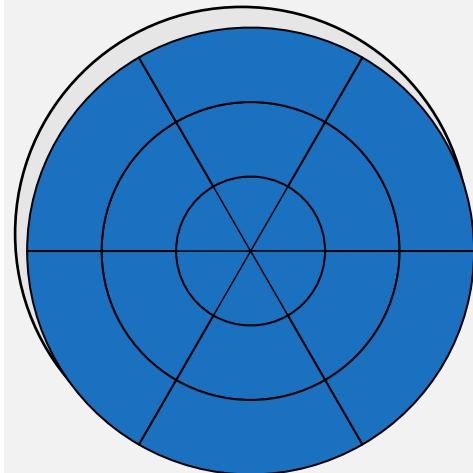
< -25.5 %

### Radial

Basal  $14.1 \pm 6.4\%$

Mid  $8.8 \pm 0.5\%$

Apical  $10.5 \pm 1.8\%$



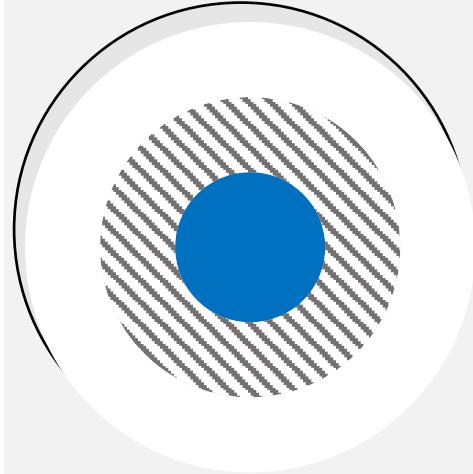
normal

pathological  
> 44.2 %

### Rotation

Basal  $-5.5 \pm 1.8\%$

Apical  $1.8 \pm 1.5\%$



normal

pathological  
basal < -3.0 %  
apical < 3.0 %

not used

## T2STIR

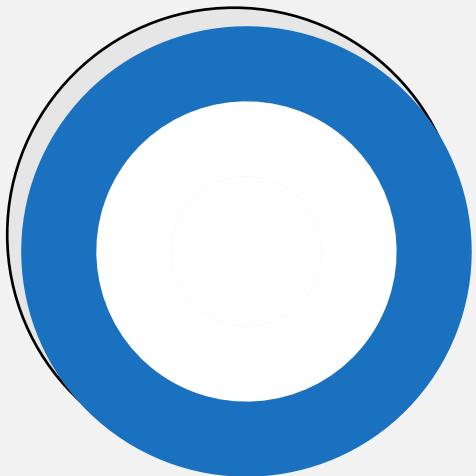
Caudal 2.2

Mid 1.4

Apical 1.5



normal  
pathological  
 $> 1.9$



## T2 Mapping

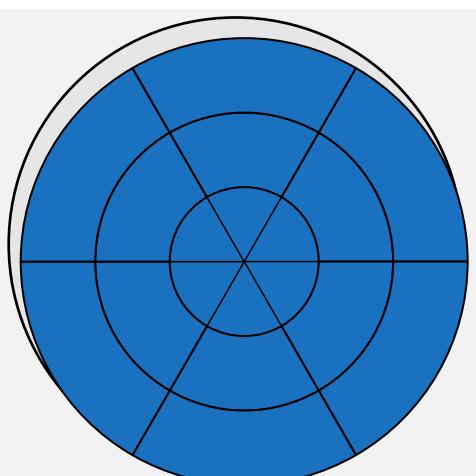
Basal  $56.9 \pm 11.0$  ms

Mid  $59.0 \pm 10.0$  ms

Apical  $58.6 \pm 7.1$  ms



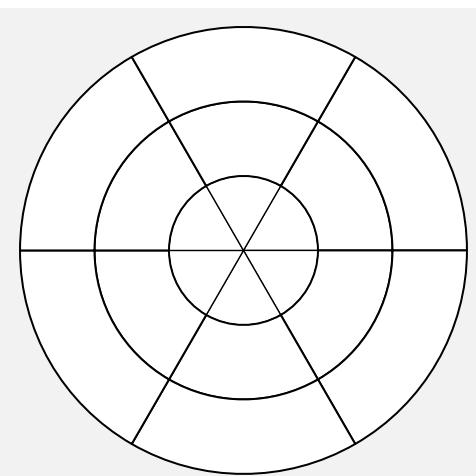
normal  
pathological  
 $> 45$  ms



## EGE



normal  
pathological



## T1 Mapping

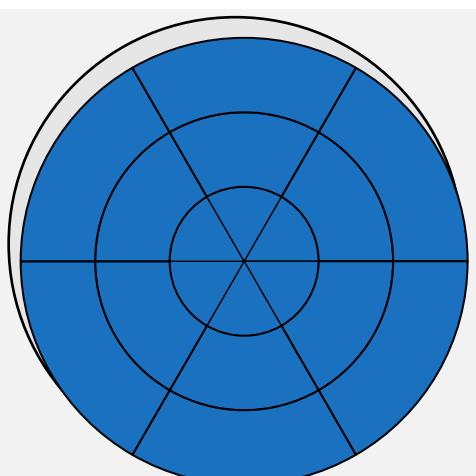
Basal  $1413 \pm 56.0$  ms

Mid  $1489 \pm 176.0$  ms

Apical  $1517 \pm 130.0$  ms



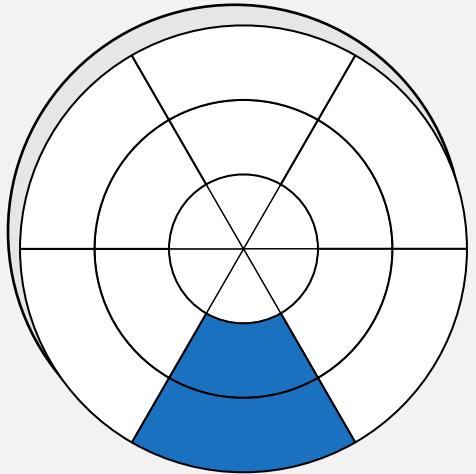
normal  
pathological  
 $> 1250$  ms



## LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-13.01 \pm 5.4\%$

> 0 %

Mid  $-18.0 \pm 3.5\%$

0 to -5.0 %

Apical  $-13.01 \pm 5.4\%$

-5.1 to -10.0 %

Basal  $-13.01 \pm 5.4\%$

-10.1 to -15.0 %

Mid  $-18.0 \pm 3.5\%$

-15.1 to 18.0 %

Apical  $-13.01 \pm 5.4\%$

< -18.0 %

### CS Epicard

Basal  $-12.44 \pm 9.1\%$

> 0 %

Mid  $-7 \pm 7.5\%$

0 to -5.0 %

Apical  $-6.3 \pm 5.8\%$

-5.1 to -13.3 %

Basal  $-12.44 \pm 9.1\%$

< -13.3 %

### CS Endocard

Basal  $-17.88 \pm 11.7\%$

> 0 %

Mid  $-21.62 \pm 12.4\%$

0 to -10.0 %

Apical  $-25.1 \pm 16.9\%$

-10.1 to -20.0 %

Basal  $-17.88 \pm 11.7\%$

-20.1 to -25.5 %

Mid  $-21.62 \pm 12.4\%$

< -25.5 %

### Radial

Basal  $49.92 \pm 3.4\%$

normal

Mid  $47.03 \pm 5.3\%$

pathological

Apical  $49.12 \pm 1.5\%$

> 44.2 %

### Rotation

Basal  $-7.48 \pm 4.8\%$

normal

Apical  $-4.24 \pm 3.1\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

### T2STIR

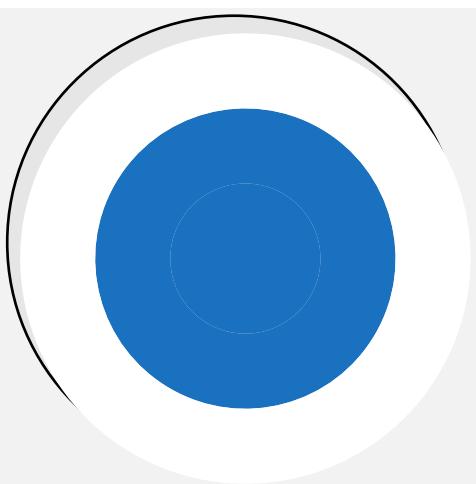
Caudal 1.75

Mid 2.0

Apical 1.9



normal  
pathological  
 $> 1.9$



### T2 Mapping

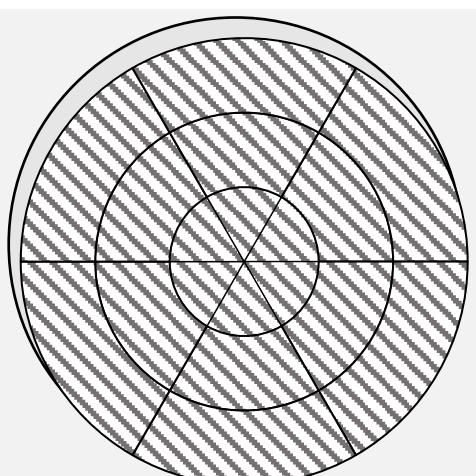
Basal not used

Mid not used

Apical not used



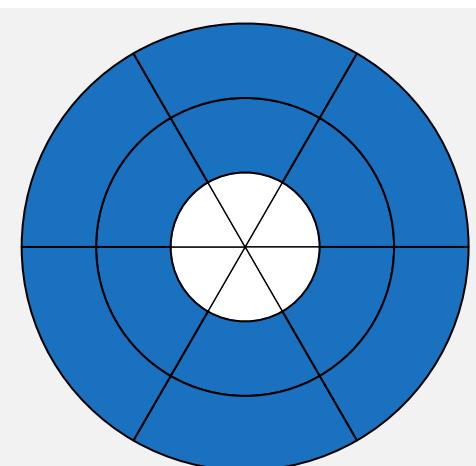
normal  
pathological  
 $> 45$  ms



### EGE



normal  
pathological



### T1 Mapping

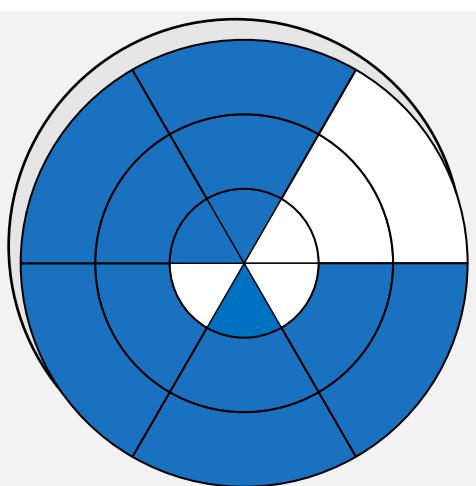
Basal  $1285 \pm 64.0$  ms

Mid  $1254 \pm 45.0$  ms

Apical  $1250 \pm 48.0$  ms



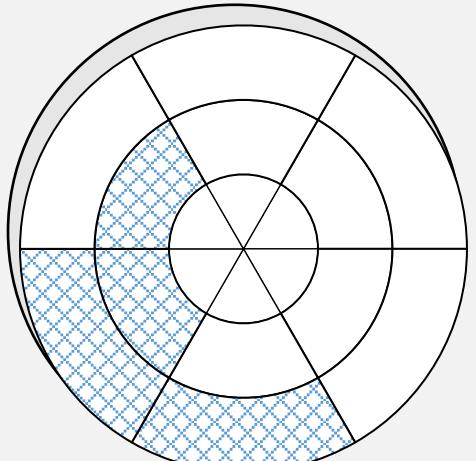
normal  
pathological  
 $> 1250$  ms



### LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-17.45 \pm 2.0\%$

> 0 %

Mid  $-18.6 \pm 1.4\%$

0 to -5.0 %

Apical  $-23.53 \pm 2.4\%$

-5.1 to -10.0 %

Basal  $-17.45 \pm 2.0\%$

-10.1 to -15.0 %

Mid  $-18.6 \pm 1.4\%$

-15.1 to 18.0 %

Apical  $-23.53 \pm 2.4\%$

< -18.0 %

### CS Epicard

Basal  $-14.39 \pm 3.7\%$

> 0 %

Mid  $-11.83 \pm 5.8\%$

0 to -5.0 %

Apical  $-8.88 \pm 6.7\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-27.38 \pm 4.1\%$

> 0 %

Mid  $-29.55 \pm 7.1\%$

0 to -10.0 %

Apical  $-21.7 \pm 7.4\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $24.53 \pm 6.0\%$

normal

Mid  $49.66 \pm 13.6\%$

pathological

Apical  $34.87 \pm 13.6\%$

> 44.2 %

### Rotation

Basal  $-8.61 \pm 12.3\%$

normal

Apical  $10.2 \pm 3.0\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

### T2STIR

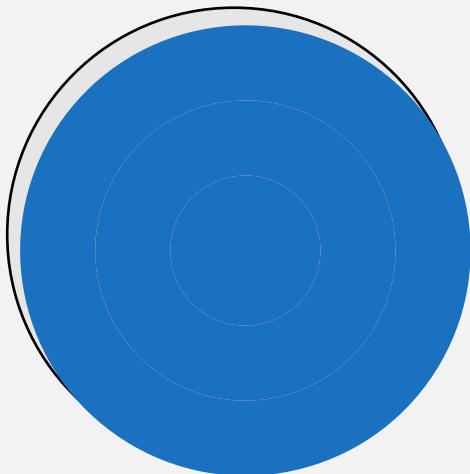
Caudal 2.8

Mid 3.2

Apical 4.5



normal  
pathological  
 $> 1.9$



### T2 Mapping

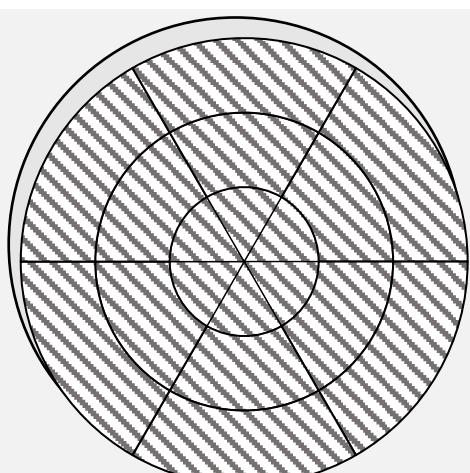
Basal not used

Mid not used

Apical not used



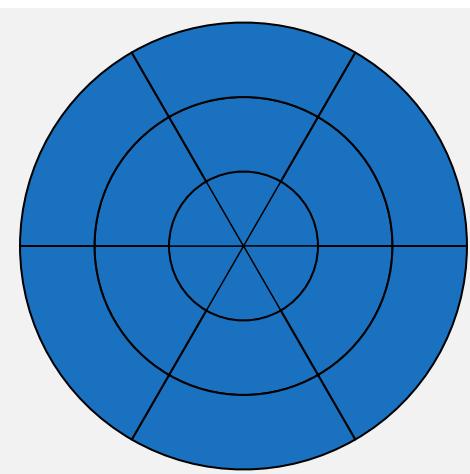
normal  
pathological  
 $> 45$  ms



### EGE



normal  
pathological



### T1 Mapping

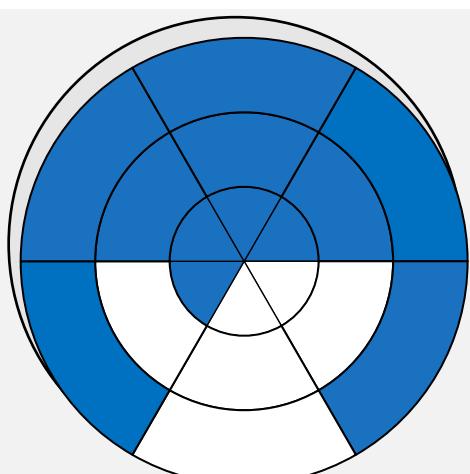
Basal  $1329 \pm 132.0$  ms

Mid  $1257.0 \pm 117.0$  ms

Apical  $1173.0 \pm 123.0$  ms



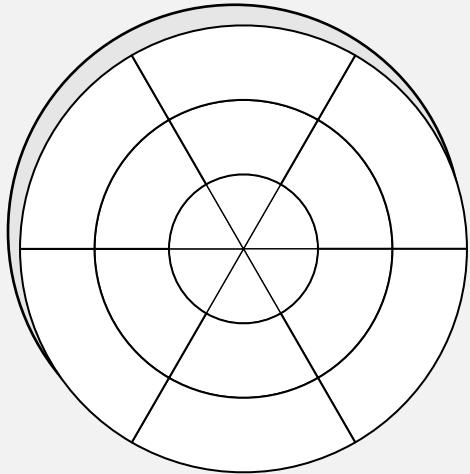
normal  
pathological  
 $> 1250$  ms



### LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-15.01 \pm 2.8\%$

> 0 %

Mid  $-15.6 \pm 2.6\%$

0 to -5.0 %

Apical  $-15.6 \pm 2.0\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %

### CS Epicard

Basal  $-16.6 \pm 8.9\%$

> 0 %

Mid  $-8.6 \pm 5.9\%$

0 to -5.0 %

Apical  $-25.0 \pm 1.7\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-30.5 \pm 9.8\%$

> 0 %

Mid  $-29.5 \pm 5.1\%$

0 to -10.0 %

Apical  $-37.7 \pm 1.9\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $43.2 \pm 6.9\%$

normal

Mid  $32.3 \pm 2.0\%$

pathological

Apical  $45.2 \pm 3.4\%$

> 44.2 %

### Rotation

Basal  $-11.7 \pm 3.7\%$

normal

Apical  $8.4 \pm 1.9\%$

pathological  
basal < -3.0 %  
apical < 3.0 %

not used

## T2STIR

Caudal 2.0

Mid 1.9

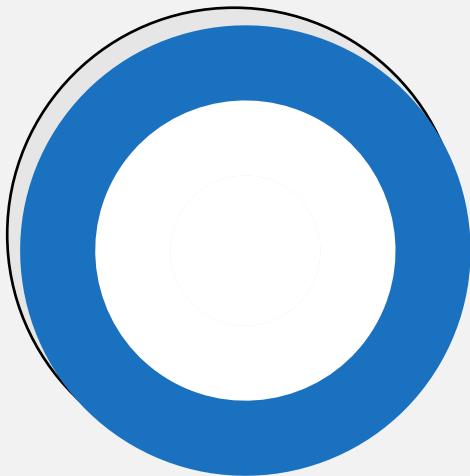
Apical 1.2



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal  $44.0 \pm 3.55$  ms

Mid  $43.3 \pm 4.6$  ms

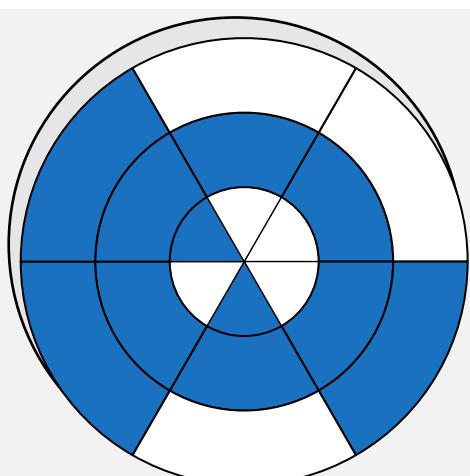
Apical  $43.5 \pm 8.4$  ms



normal



pathological  
 $> 45$  ms



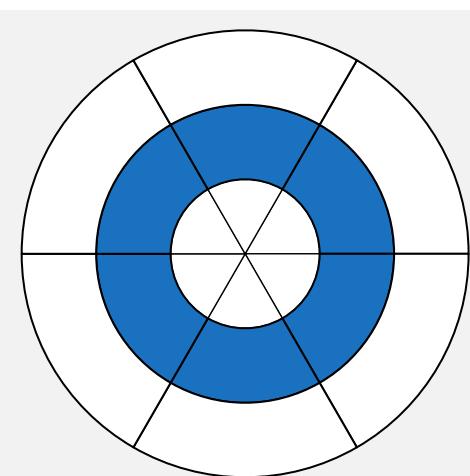
## EGE



normal



pathological



## T1 Mapping

Basal  $1189 \pm 112.0$  ms

Mid  $1205 \pm 106.0$  ms

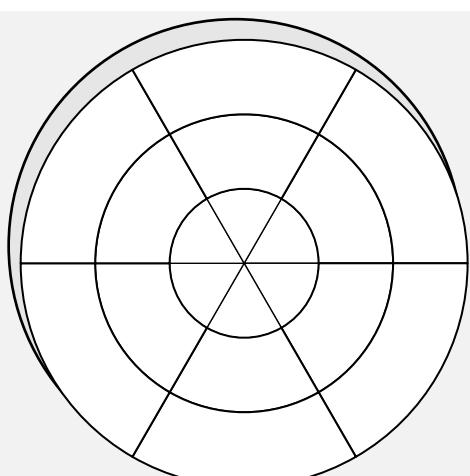
Apical  $1184 \pm 58.0$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



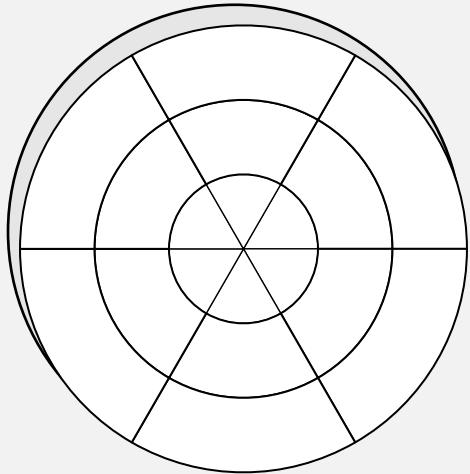
subendocardial



transmural



diffuse



### GLS

Basal  $-17.56 \pm 1.3\%$

> 0 %

Mid  $-18.16 \pm 2.0\%$

0 to -5.0 %

Apical  $-17.79 \pm 5.3\%$

-5.1 to -10.0 %

Basal  $-17.56 \pm 1.3\%$

-10.1 to -15.0 %

Mid  $-18.16 \pm 2.0\%$

-15.1 to 18.0 %

Apical  $-17.79 \pm 5.3\%$

< -18.0 %

### CS Epicard

Basal  $-11.74 \pm 5.7\%$

> 0 %

Mid  $-12.2 \pm 6.4\%$

0 to -5.0 %

Apical  $-10.46 \pm 2.0\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-28.85 \pm 4.1\%$

> 0 %

Mid  $-19.95 \pm 4.7\%$

0 to -10.0 %

Apical  $-26.46 \pm 2.6\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $50.63 \pm 7.9\%$

normal

Mid  $46.57 \pm 7.9\%$

pathological

Apical  $41.15 \pm 11.8\%$

> 44.2 %

### Rotation

Basal  $-3.32 \pm 2.5\%$

normal

Apical  $4.91 \pm 0.43\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

## T2STIR

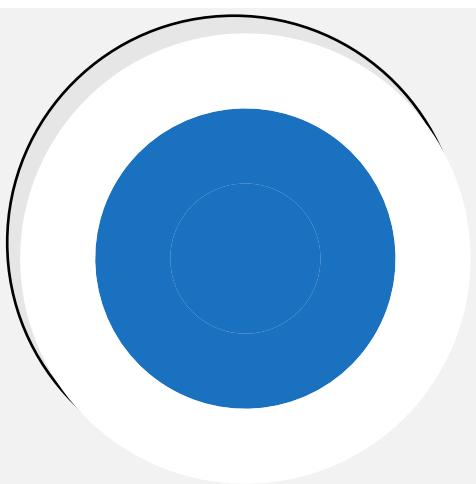
Caudal 1.64

Mid 2.64

Apical 3.22



normal  
pathological  
 $> 1.9$



## T2 Mapping

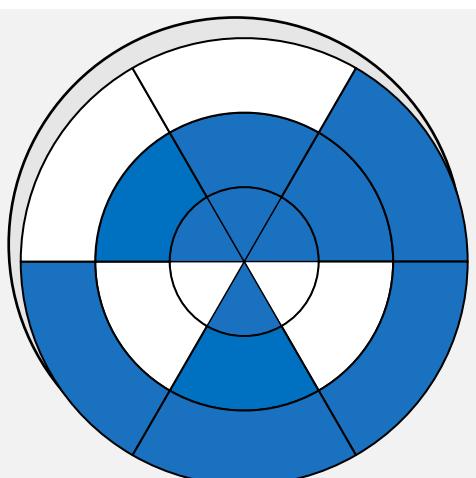
Basal  $48.9 \pm 8.6$  ms

Mid  $45.6 \pm 7.0$  ms

Apical  $49.4 \pm 6.5$  ms



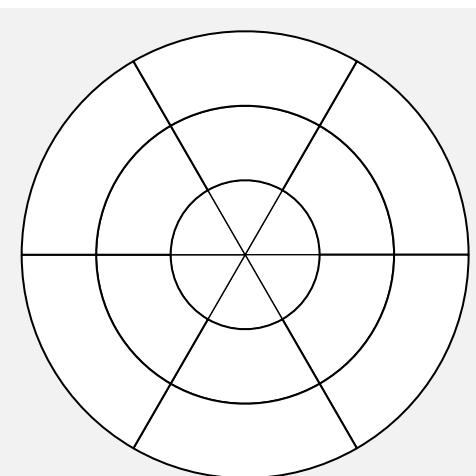
normal  
pathological  
 $> 45$  ms



## EGE



normal  
pathological



## T1 Mapping

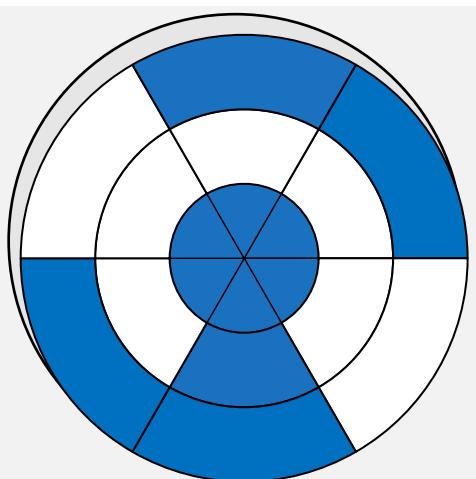
Basal  $1254 \pm 92$  ms

Mid  $1228 \pm 89.0$  ms

Apical  $1406 \pm 79.0$  ms



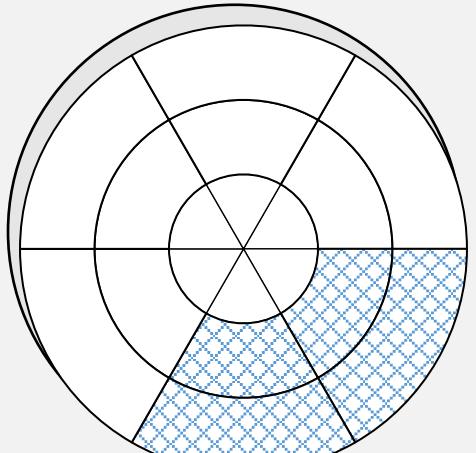
normal  
pathological  
 $> 1250$  ms



## LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-14.4 \pm 5.1\%$

> 0 %

Mid  $-16.5 \pm 8.0\%$

0 to -5.0 %

Apical  $-20.8 \pm 8.0\%$

-5.1 to -10.0 %

Basal  $-14.4 \pm 5.1\%$

-10.1 to -15.0 %

Mid  $-16.5 \pm 8.0\%$

-15.1 to 18.0 %

Apical  $-20.8 \pm 8.0\%$

< -18.0 %

### CS Epicard

Basal  $-13.5 \pm 8.0\%$

> 0 %

Mid  $-19.4 \pm 8.5\%$

0 to -5.0 %

Apical  $-13.0 \pm 6.6\%$

-5.1 to -13.3 %

Basal  $-13.5 \pm 8.0\%$

< -13.3 %

### CS Endocard

Basal  $-23.0 \pm 10.4\%$

> 0 %

Mid  $-31.0 \pm 11.7\%$

0 to -10.0 %

Apical  $-23.1 \pm 8.7\%$

-10.1 to -20.0 %

Basal  $-23.0 \pm 10.4\%$

-20.1 to -25.5 %

Mid  $-31.0 \pm 11.7\%$

< -25.5 %

### Radial

Basal  $19.6 \pm 1.9\%$

normal

Mid  $32.2 \pm 2.2\%$

pathological

Apical  $35.3 \pm 3.4\%$

> 44.2 %

### Rotation

Basal  $-3.3 \pm 4.7\%$

normal

Apical  $12.2 \pm 3.7\%$

pathological  
basal < -3.0 %  
apical < 3.0 %

not used

## T2STIR

Caudal 1.9

Mid 2.2

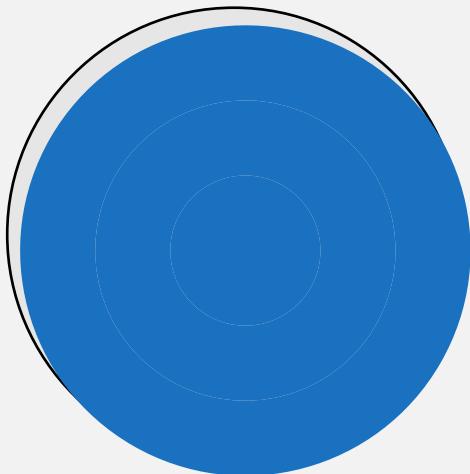
Apical 2.2



normal



pathological  
 $> 1.9$



## T2 Mapping

Basal  $53.1 \pm 13.0$  ms

Mid  $47.8 \pm 9.2$  ms

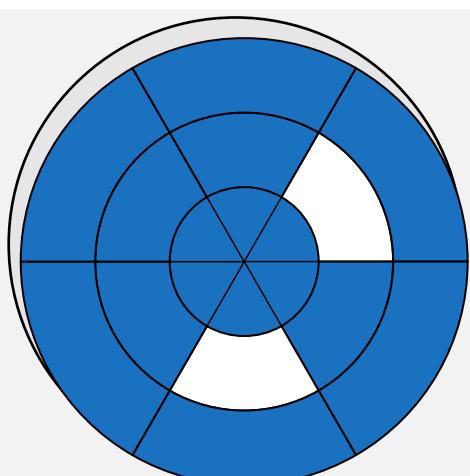
Apical  $50.5 \pm 7.6$  ms



normal



pathological  
 $> 45$  ms



## EGE



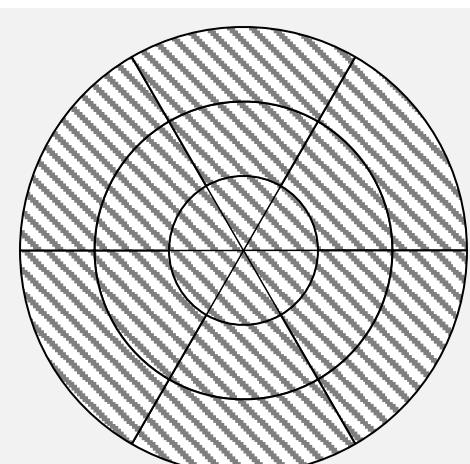
normal



pathological



not used



## T1 Mapping

Basal  $1311 \pm 99.0$  ms

Mid  $1283 \pm 77.0$  ms

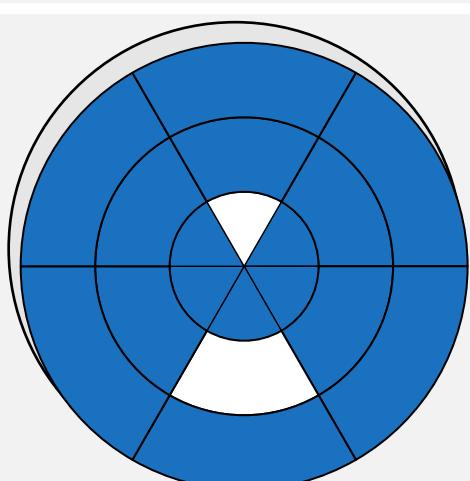
Apical  $1320 \pm 89.0$  ms



normal



pathological  
 $> 1250$  ms



## LGE



normal



subepicardial



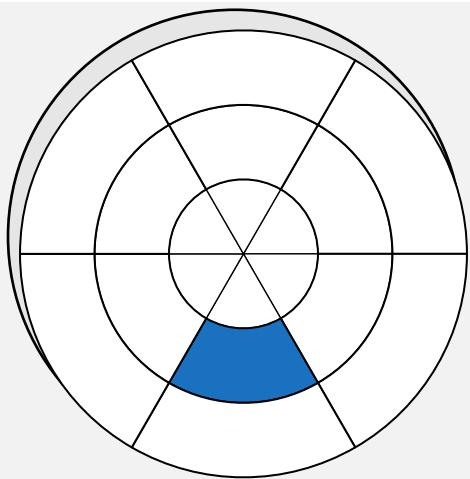
subendocardial



transmural



diffuse



### GLS

Basal  $-18.4 \pm 3.7\%$

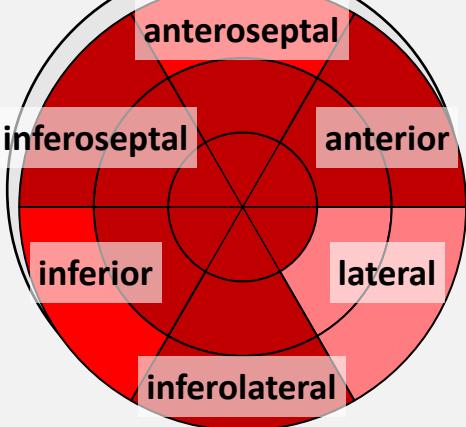
> 0 %

Mid  $-19.1 \pm 4.0\%$

0 to -5.0 %

Apical  $-24.6 \pm 2.5\%$

-5.1 to -10.0 %



### CS Epicard

Basal  $-8.6 \pm 19.6\%$

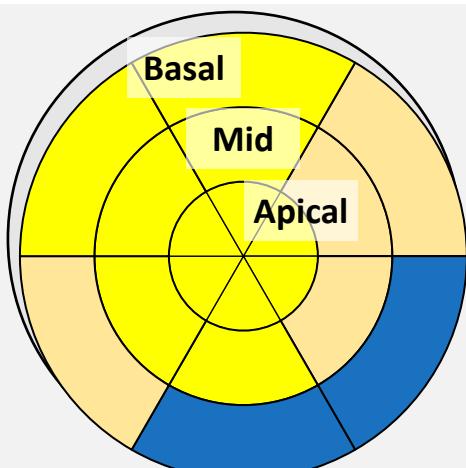
> 0 %

Mid  $-18.1 \pm 1.9\%$

0 to -5.0 %

Apical  $-19.6 \pm 3.4\%$

-5.1 to -13.3 %



### CS Endocard

Basal  $-18.4 \pm 26.9\%$

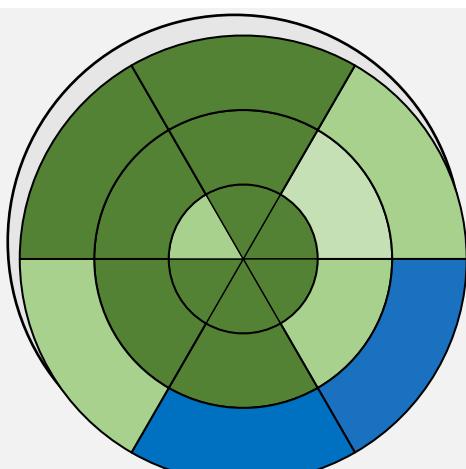
> 0 %

Mid  $-32.4 \pm 14.2\%$

0 to -10.0 %

Apical  $-34.2 \pm 6.6\%$

-10.1 to -20.0 %



-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $23.2 \pm 4.3\%$

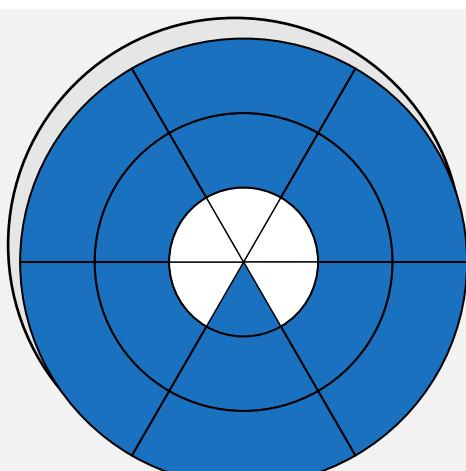
normal

Mid  $32.5 \pm 2.6\%$

pathological

Apical  $50.1 \pm 6.5\%$

> 44.2 %



### Rotation

Basal  $-5.5 \pm 6.1\%$

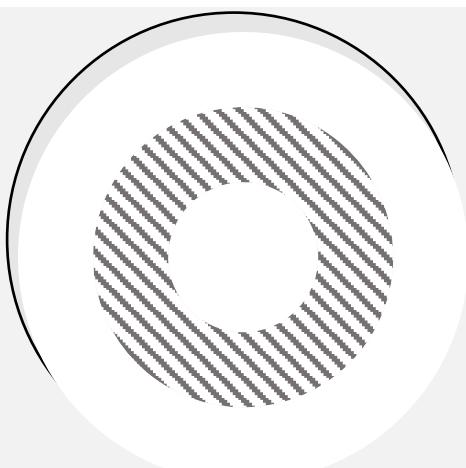
normal

Apical  $10.8 \pm 3.4\%$

pathological

basal < -3.0 %

apical < 3.0 %



not used

## T2STIR

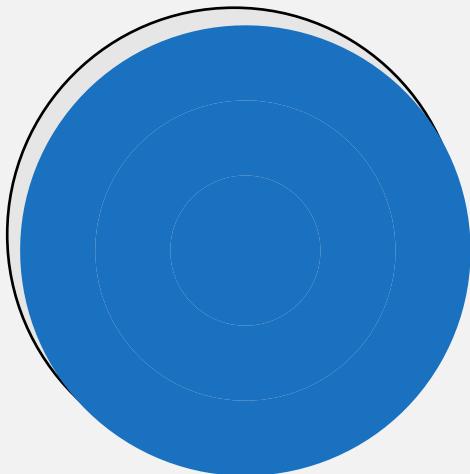
Caudal 2.38

Mid 2.32

Apical 3.87



normal  
pathological  
 $> 1.9$



## T2 Mapping

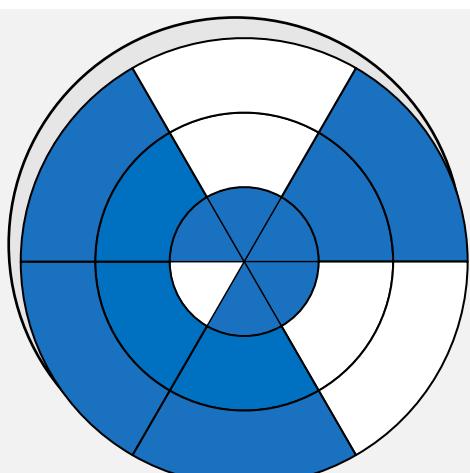
Basal  $46.7 \pm 7.7$  ms

Mid  $50.1 \pm 11.4$  ms

Apical  $53.5 \pm 12.0$  ms



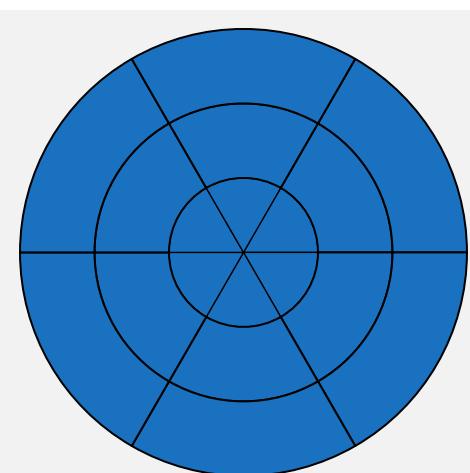
normal  
pathological  
 $> 45$  ms



## EGE



normal  
pathological



## T1 Mapping

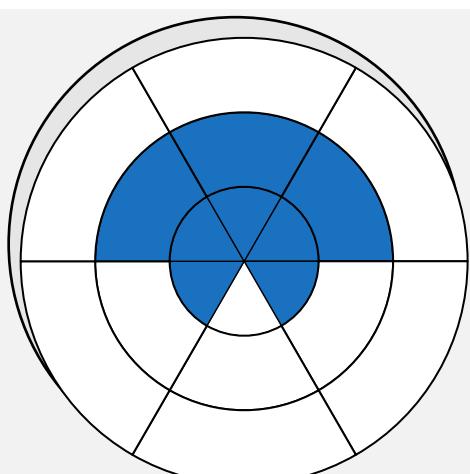
Basal  $1227 \pm 159.0$  ms

Mid  $1263 \pm 140.0$  ms

Apical  $1465 \pm 329.0$  ms



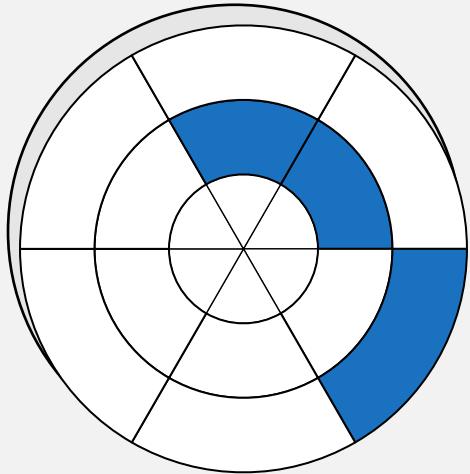
normal  
pathological  
 $> 1250$  ms



## LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-17.1 \pm 1.5\%$

> 0 %

Mid  $-18.6 \pm 2.0\%$

0 to -5.0 %

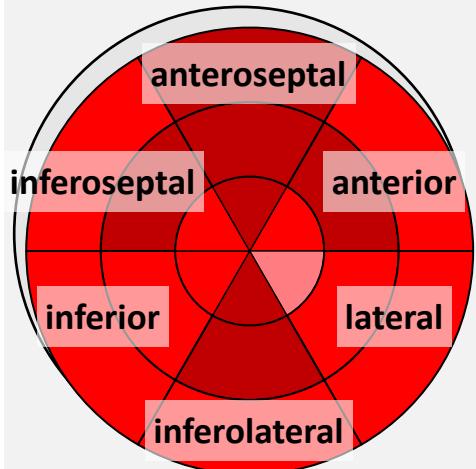
Apical  $-18.3 \pm 4.3\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %



### CS Epicard

Basal  $-9.9 \pm 11.2\%$

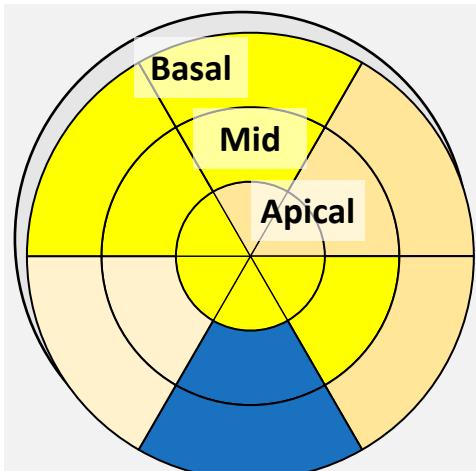
> 0 %

Mid  $-10.9 \pm 10.3\%$

0 to -5.0 %

Apical  $-15.6 \pm 3.0\%$

-5.1 to -13.3 %



### CS Endocard

Basal  $-29.8 \pm 14.0\%$

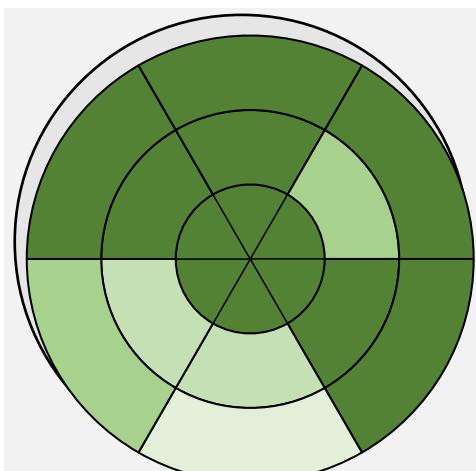
> 0 %

Mid  $-27.3 \pm 11.1\%$

0 to -10.0 %

Apical  $-33.5 \pm 4.0\%$

-10.1 to -20.0 %



### Radial

Basal  $50.2 \pm 8.7\%$

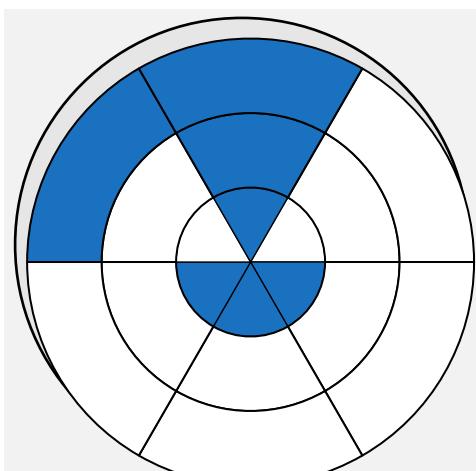
normal

Mid  $44.6 \pm 7.8\%$

pathological

Apical  $44.2 \pm 1.0\%$

> 44.2 %



### Rotation

Basal  $-1.8 \pm 4.6\%$

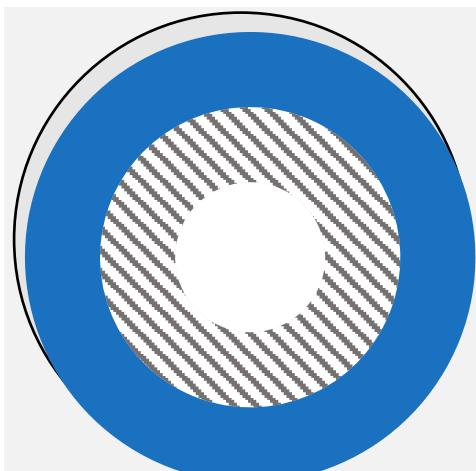
normal

Apical  $6.9 \pm 1.4\%$

pathological

basal < -3.0 %

apical < 3.0 %



not used

## T2STIR

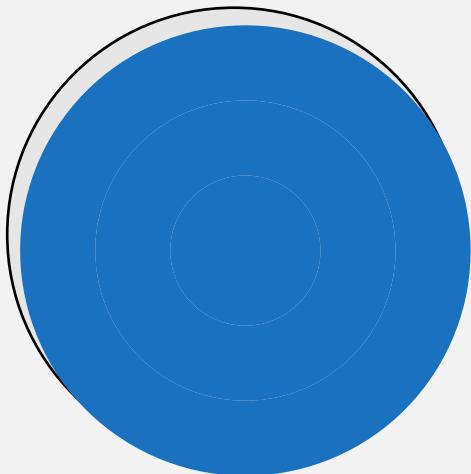
Caudal 2.49

Mid 3.3

Apical 4.4



normal  
pathological  
 $> 1.9$



## T2 Mapping

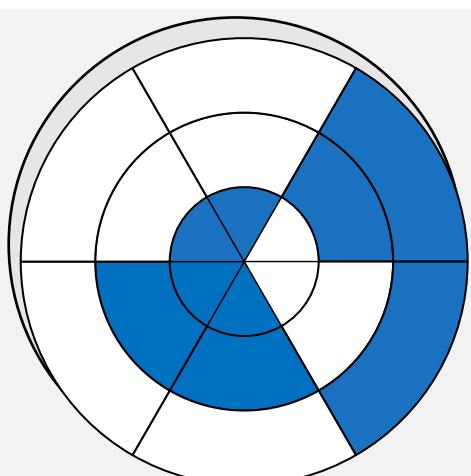
Basal  $43.8 \pm 6.4$

Mid  $45.1 \pm 4.3$

Apical  $46.2 \pm 6.9$



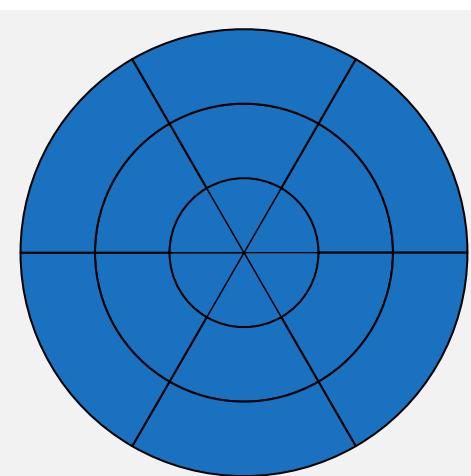
normal  
pathological  
 $> 45$  ms



## EGE



normal  
pathological



## T1 Mapping

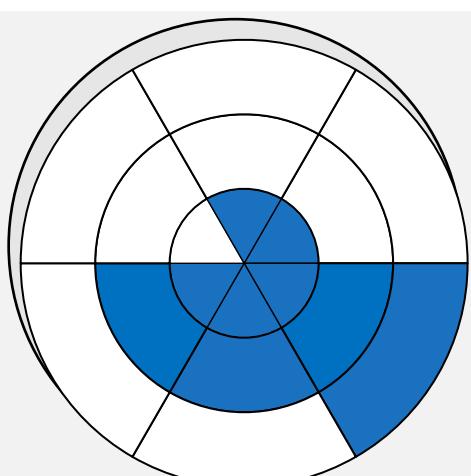
Basal  $1238 \pm 86.0$

Mid  $1276 \pm 91.0$

Apical  $1265 \pm 88.0$



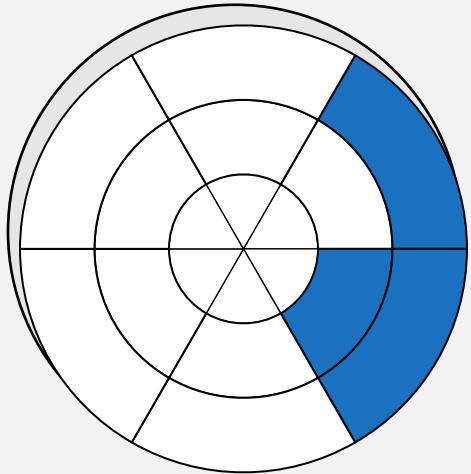
normal  
pathological  
 $> 1250$  ms



## LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse



### GLS

Basal  $-22.4 \pm 4.0\%$

> 0 %

Mid  $-24.1 \pm 2.7\%$

0 to -5.0 %

Apical  $-30.2 \pm 1.6\%$

-5.1 to -10.0 %

-10.1 to -15.0 %

-15.1 to 18.0 %

< -18.0 %

### CS Epicard

Basal  $-12.8 \pm 5.4\%$

> 0 %

Mid  $-7.32 \pm 19.53\%$

0 to -5.0 %

Apical  $-13.6 \pm 2.4\%$

-5.1 to -13.3 %

< -13.3 %

### CS Endocard

Basal  $-31.2 \pm 9.6\%$

> 0 %

Mid  $-18.01 \pm 26.33\%$

0 to -10.0 %

Apical  $-26.1 \pm 7.4\%$

-10.1 to -20.0 %

-20.1 to -25.5 %

< -25.5 %

### Radial

Basal  $13.5 \pm 1.8\%$

normal

Mid  $8.6 \pm 5.2\%$

pathological

Apical  $19.8 \pm 1.1\%$

> 44.2 %

### Rotation

Basal  $-3.6 \pm 3.7\%$

normal

Apical  $7.7 \pm 6.3\%$

pathological

basal < -3.0 %

apical < 3.0 %

not used

### T2STIR

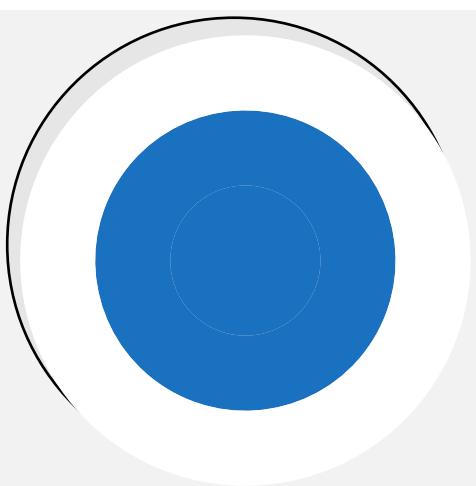
Caudal 1.7

Mid 2.7

Apical 3.75



normal  
pathological  
 $> 1.9$



### T2 Mapping

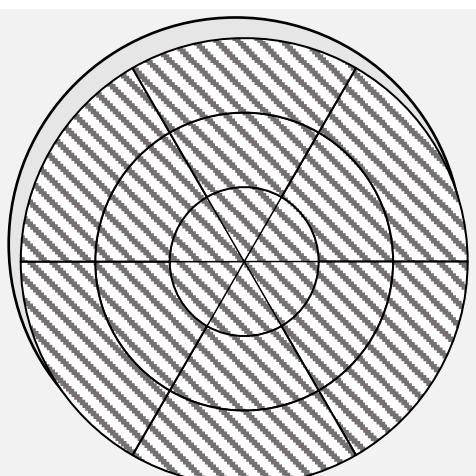
Basal not used

Mid not used

Apical not used



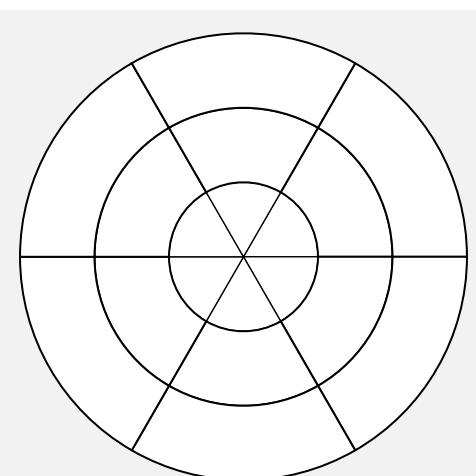
normal  
pathological  
 $> 45$  ms



### EGE



normal  
pathological



### T1 Mapping

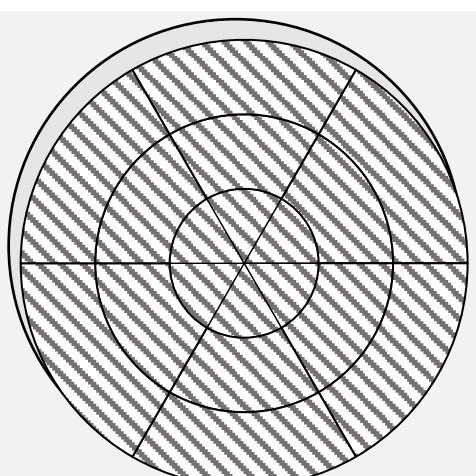
Basal not used

Mid not used

Apical not used



normal  
pathological  
 $> 1250$  ms



### LGE



normal  
subepicardial  
subendocardial  
transmural  
diffuse

