## Bone Roughness | ReadMyXray

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## X-ray and measures in 2013

Anteroposterior x-ray image of knee

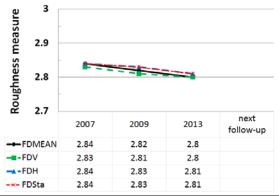
Trabecular bone roughness measures



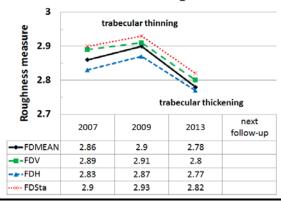
Measures	FD <sub>MEAN</sub>	FD <sub>V</sub>	FD <sub>H</sub>	FD <sub>Sta</sub>
Bone region				
1	2.80	2.80	2.81	2.81
2	2.78	2.80	2.77	2.82

## Trabecular bone roughness curves up to 2013

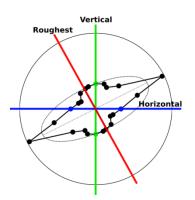
Trabecular bone region 1



Trabecular bone region 2



**Explanation:** For each bone region we produce a plot of roughness coefficients (black dots) to which we fit an ellipse (dotted lines). The roughest part direction is along the line running through the smallest distance across the ellipse (red line). Based on the plot we calculate four basic radiographic measures:



**FD**<sub>MEAN</sub> – a measure of roughness in all directions (mean of all dots)

FD<sub>V</sub>, FD<sub>H</sub> - a measure of roughness along the vertical (green) and horizontal (blue) direction

FD<sub>Sta</sub> - a measure of roughness along the roughest direction (red)

The measures range from 2 to 3, with higher values representing higher roughness.

Note: The radiographic measures are not diagnostic results. To obtain a diagnosis, please consult your GP or radiologist.

Email: Web:

**Curtin University**