

Prostate results 260204

PSA-Diff-NearSlack

Results from latest version.

Set grow_near = True (compact tumour)

Tumour centre, indices 22, 23, 24

Tumour radius 0.6

Prostate centre, indices 28, 29, 30 (peripheral tumour)

Prostate radius 10

Interface area, time 36

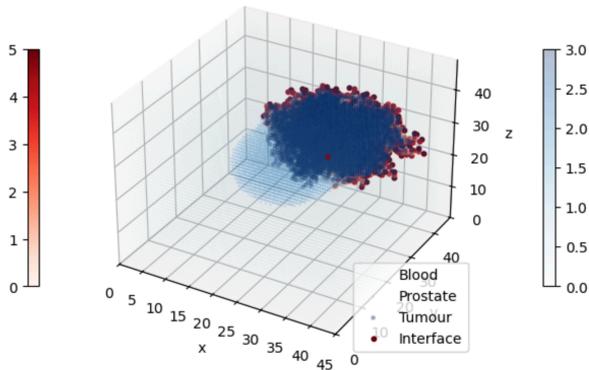


image-269.png

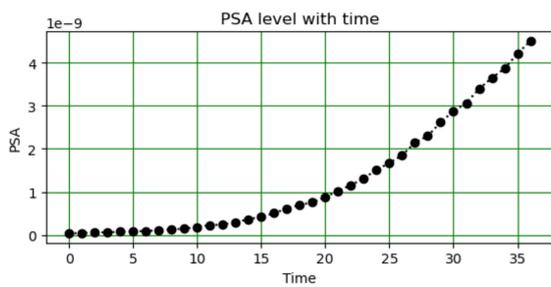
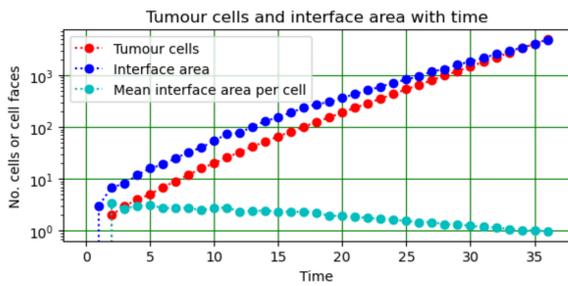


image-270.png

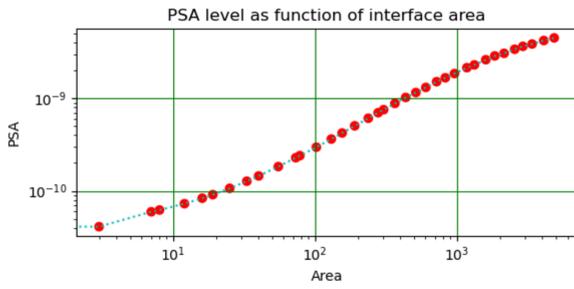
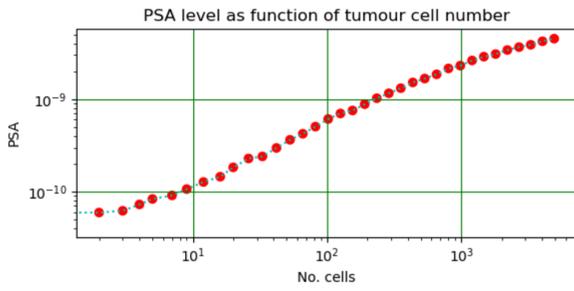


image-271.png

Tumour centre, indices 22, 23, 24

Tumour radius 0.6

Prostate centre, indices 22, 23, 24 (central tumour)

Prostate radius 10

Interface area, time 42

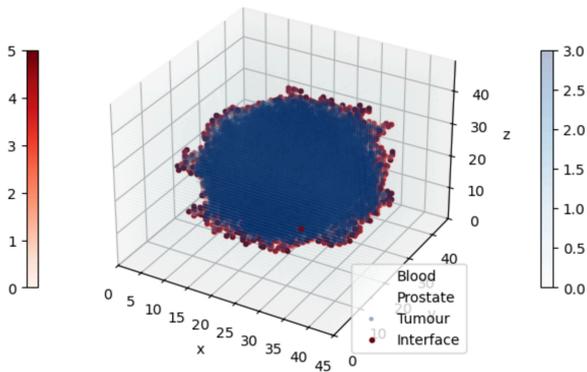


image-276.png

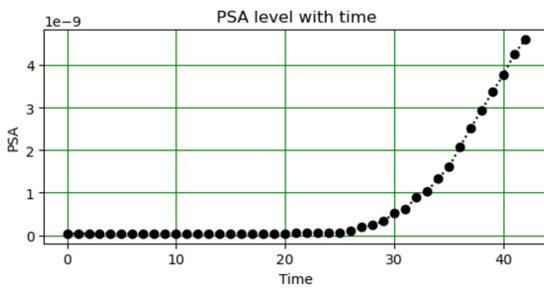
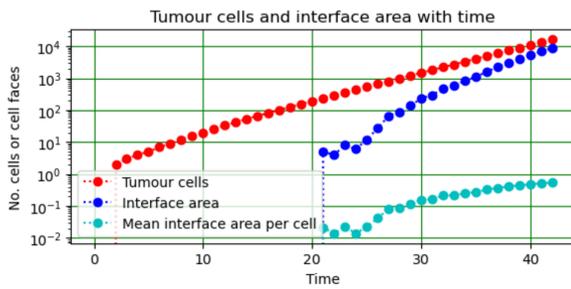


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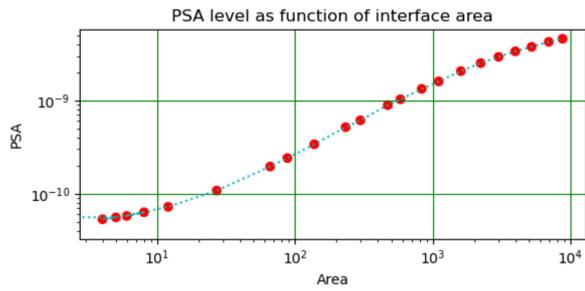
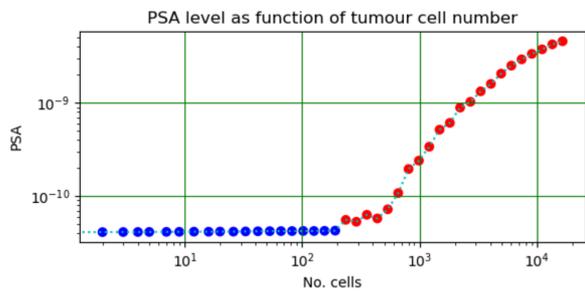


image-278.png

Tumour centre, indices 26, 27, 28

Tumour radius 0.6

Prostate centre, indices 22, 23, 24 (off-centre but still in prostate)

Prostate radius 10

Interface area, time 36

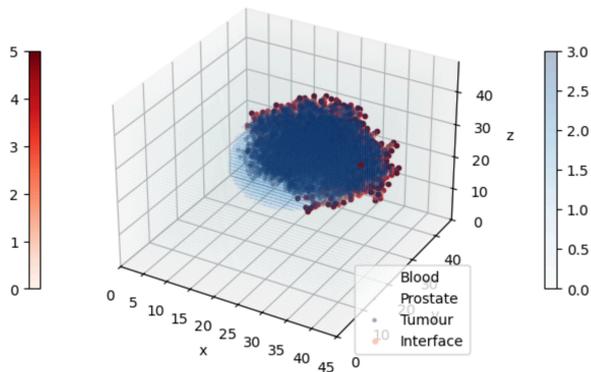


image-324.png

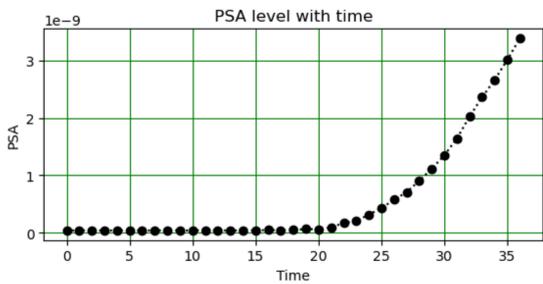
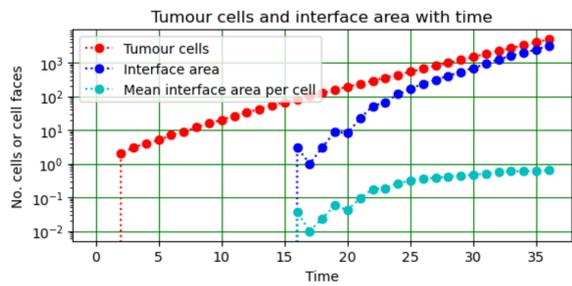


image-325.png

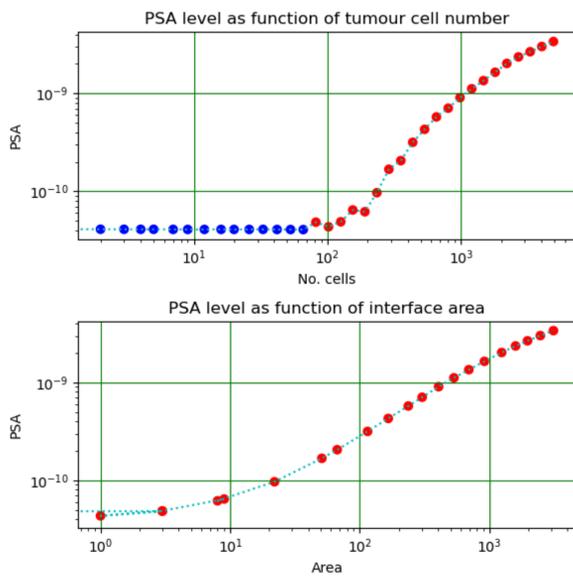


image-326.png

See that area to PSA curve is very similar in all cases, but that PSA to number of cells curve depends on location of tumour.

Change to grow_near = False

Tumour centre, indices 22, 23, 24

Tumour radius 0.6

Prostate centre, indices 22, 23, 24 (central tumour)

Prostate radius 10

Interface area, time 37

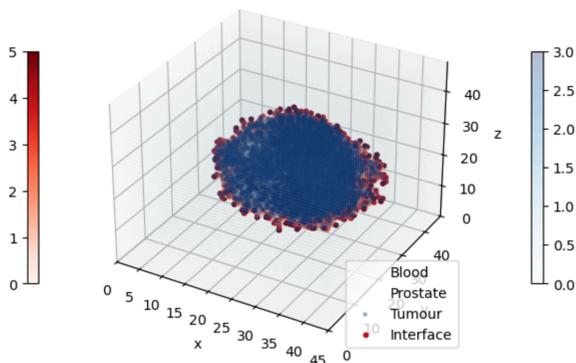


image-309.png

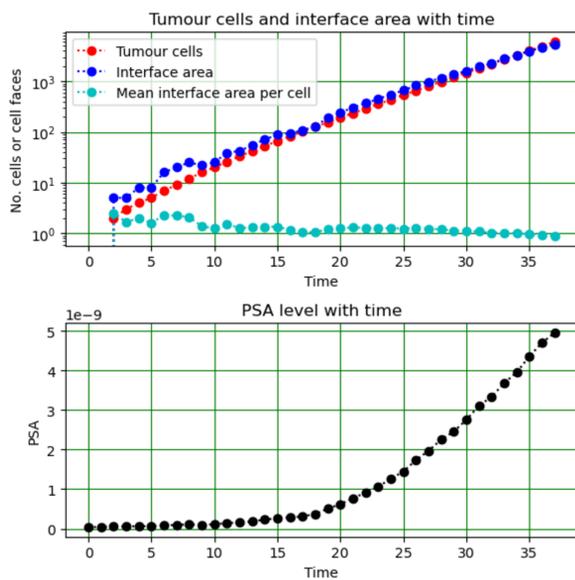


image-310.png

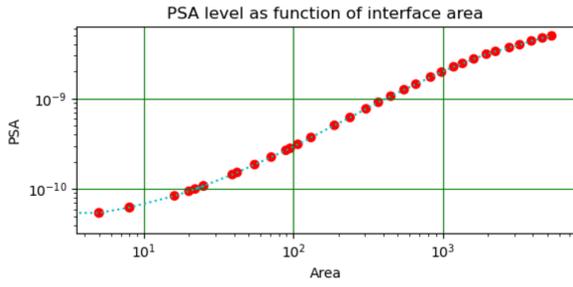
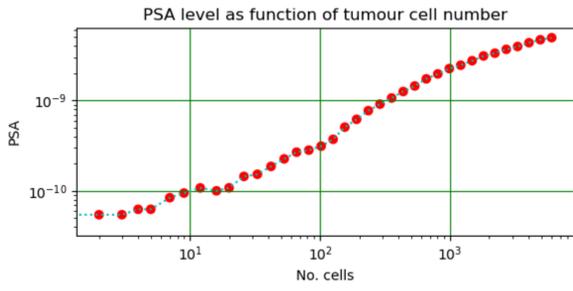


image-323.png

Tumour growth algorithm also has a big effect.