

## A. W. Patient Summary

### Patient Study Based on Lesion Graph



t0

t1

t2

Di Veroli B., Joskowicz L. A Graph Theoretic Approach for Analysis of Lesion Changes and Lesions Detection Review in Longitudinal Ontological Imaging, CASMIP Hebrew University, 2023

Lesion Counting According to Their Classification

Time Layer	complex	disappeared	lone	merged	new	persistent	split
0	0	0	0	0	2	0	0
1	0	0	0	0	0	2	0
2	0	0	0	0	0	2	0

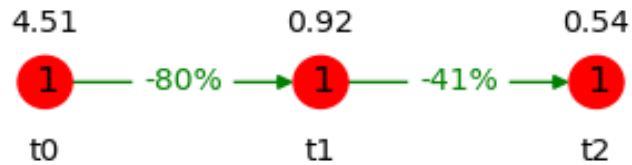
Tracking the Changes in the Total Volume of the Tumors From One Scan to the Previous One

Time Stamp	Total Volume [cm <sup>3</sup> ]	Volume Difference Percentage	Volume Difference [cm <sup>3</sup> ]
0	12.82	0%	0
1	4.52	-65%	-8.3
2	1.6	-65%	-2.92

# Individual Lesion Changes

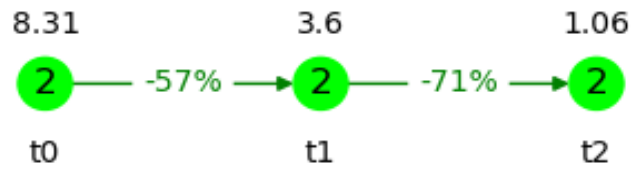
In the following graphs along each edge, the % change in volume between one scan and the next is shown in green/red; On top of each node, the actual volume is shown in cubic cm, and under each node the time stamp appears.

## The History of Lesion 1



Lesion 1: Lesion volume has decreased by 41% from previous scan to current scan. Volume consistently decreased over time by 88% from first scan to last scan.

## The History of Lesion 2



Lesion 2: Lesion volume has decreased by 71% from previous scan to current scan. Volume consistently decreased over time by 87% from first scan to last scan.

## Total Lesion Growth History

Tumor burden of 2 lesions decreased over time by 88%