

# 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 Count According to 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	-	-
1	4.52	-65%	-8.3
2	1.6	-65%	-2.92



# Individual Lesion Changes

## New Lesions

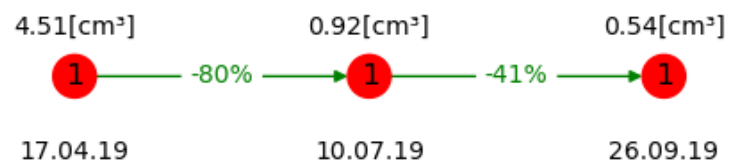
No new lesions had appeared.

## Disappeared Lesions

Over time, no lesions disappeared.

## Lesions Appearing in Multiple Scans

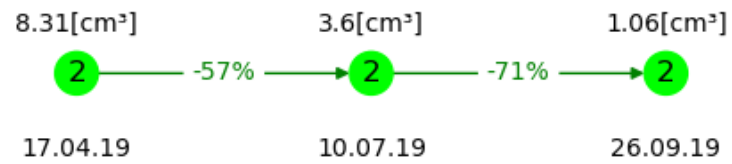
### • The History of Lesion 1



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.

Classification of connected component: linear.

### • The History of 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.

Classification of connected component: linear.