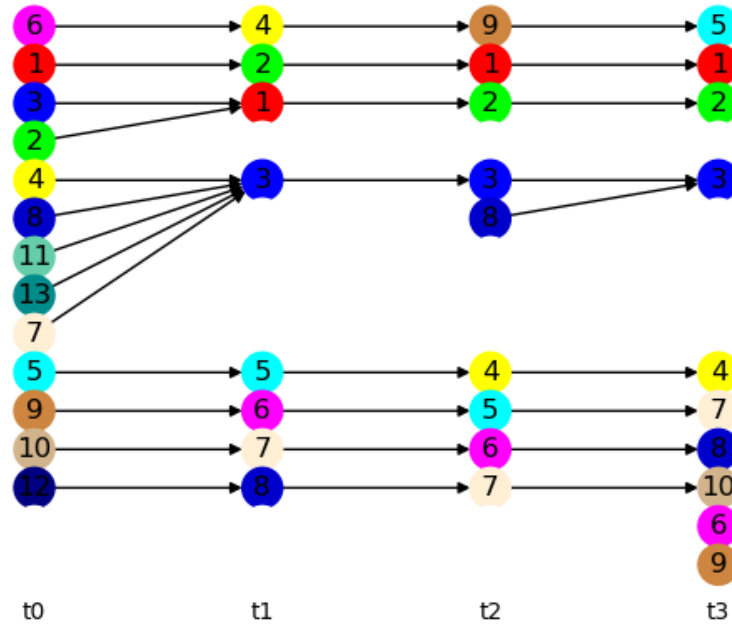


## A. S. H. Patient Summary

### Patient Study Based on Lesion Graph



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

Lesion Counting According to Their Classification

Time Layer	complex	disappeared	lone	merged	new	persistent	split
0	0	0	0	0	13	0	0
1	0	0	0	2	0	6	0
2	0	0	0	0	1	8	0
3	0	0	2	1	0	7	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	647.47	0%	0
1	712.19	+10%	+64.73
2	690.31	-3%	-21.88
3	785.18	+14%	+94.87



# Individual Lesion Changes

## New Lesions

Lesions 6, 9 appeared for the first time in the last scan.

## Lesions that have disappeared over time

Over time, no lesions disappeared.

## Lesions appearing throughout several scans

### The History of Lesion 5



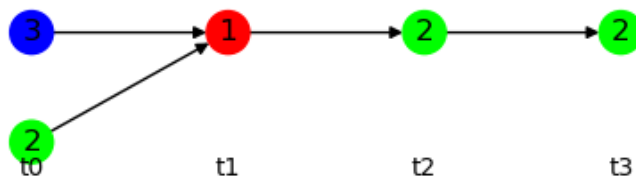
Classification of connected component: linear\_p

### The History of Lesion 1



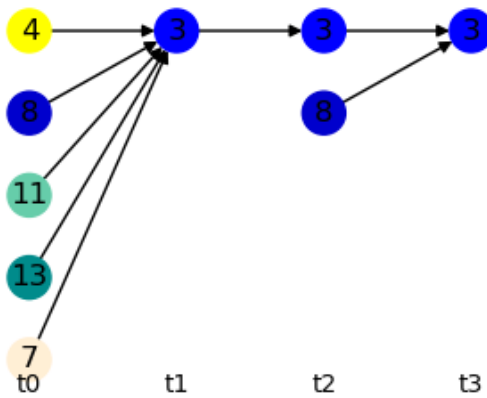
Classification of connected component: linear\_p

### The History of Lesion 2



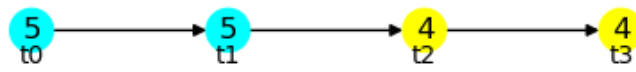
Classification of connected component: merge\_p

### The History of Lesion 3



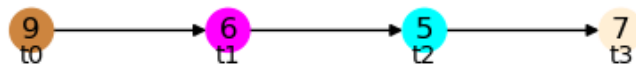
Classification of connected component: merge\_p

### The History of Lesion 4



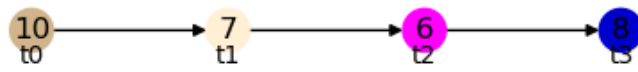
Classification of connected component: linear\_p

### The History of Lesion 7



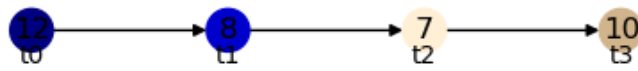
Classification of connected component: linear\_p

### The History of Lesion 8



Classification of connected component: linear\_p

### The History of Lesion 10



Classification of connected component: linear\_p