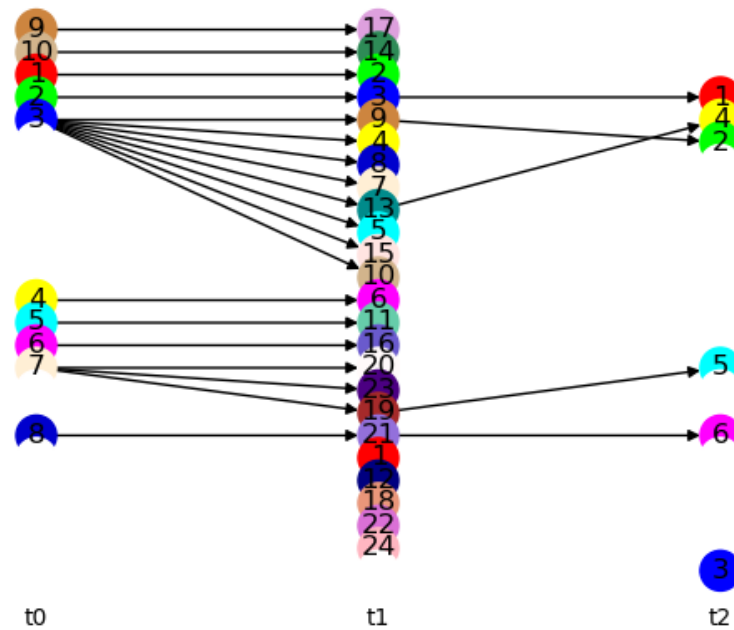


B. T. Patient Summary

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, CASMIP Hebrew University, 2023

Lesion Counting According to Their Classification

| Time Layer | complex | disappeared | lone | merged | new | persistent | split |
|------------|---------|-------------|------|--------|-----|------------|-------|
| 0 | 0 | 0 | 0 | 0 | 8 | 0 | 2 |
| 1 | 0 | 0 | 5 | 0 | 0 | 19 | 0 |
| 2 | 0 | 19 | 1 | 0 | 0 | 5 | 0 |

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

| Time Stamp | Total Volume [cm ³] | Volume Difference Percentage | Volume Difference [cm ³] |
|------------|---------------------------------|------------------------------|--------------------------------------|
| 0 | 51.14 | - | - |
| 1 | 67.0 | +31% | +15.86 |
| 2 | 1.09 | -98% | -65.9 |

Individual Lesion Changes

New Lesions

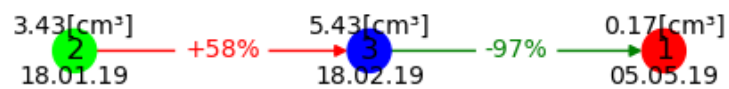
Lesion 3 appeared for the first time in the last scan.

Lesions that have disappeared over time

Over time, 11 lesions disappeared.
They were last identified in t1 scan.

Lesions appearing throughout several scans

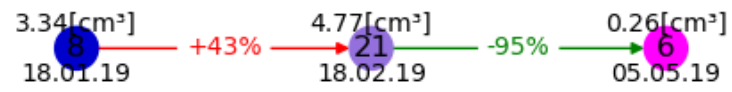
The History of Lesion 1



Lesion volume has decreased by 327% from previous scan to current scan. Volume consistently decreased over time by 60% from first scan to last scan.

Classification of connected component: linear_p

The History of Lesions 2, 4



Lesion volume has decreased by 81% from previous scan to current scan. Volume consistently increased over time by 498% from first scan to last scan.

Classification of connected component: linear_p