

Supplemental Material

CXCR4-targeted positron emission tomography imaging of central nervous system

B-cell lymphoma

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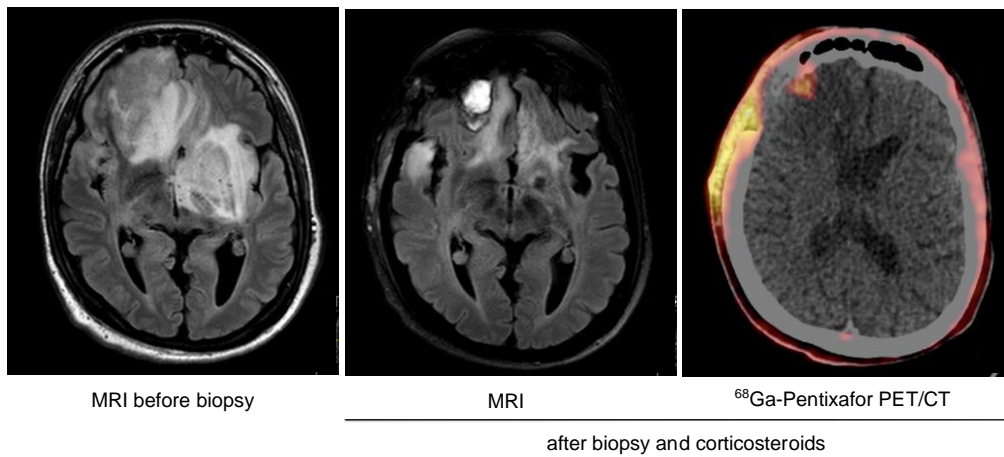
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Supplemental Figure 1. Negativity for CXCR4-directed PET correlates with MRI.

Supplemental Figure 2. Timeline of conducted therapies and timing of MRI.

Supplemental Figure 3. Tumor dynamics upon treatment determined by MRI.

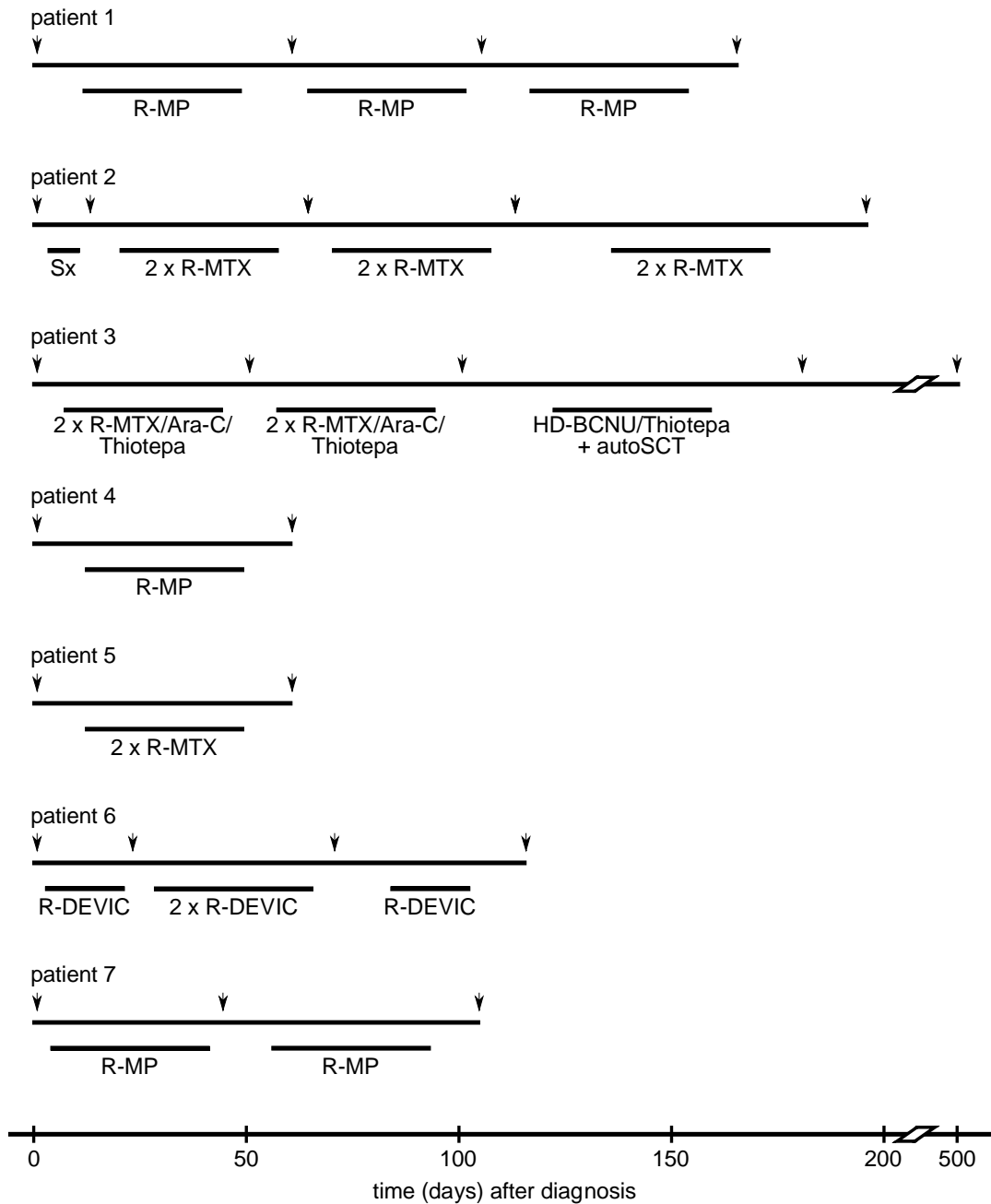
Supplemental Figure 1



Supplemental Figure 1. Negativity for CXCR4-directed PET correlates with MRI.

Representative MR images of patient #1 at diagnosis (MRI before biopsy) show multifocal lymphoma masses. After extended biopsy and corticosteroid treatment former lymphoma lesions were neither detectable by MRI nor was specific tracer uptake seen in ⁶⁸Ga-Pentixafor PET/CT. Due to different angulation during MRI- and PET- acquisition images were chosen to reflect areas of former lymphoma lesions.

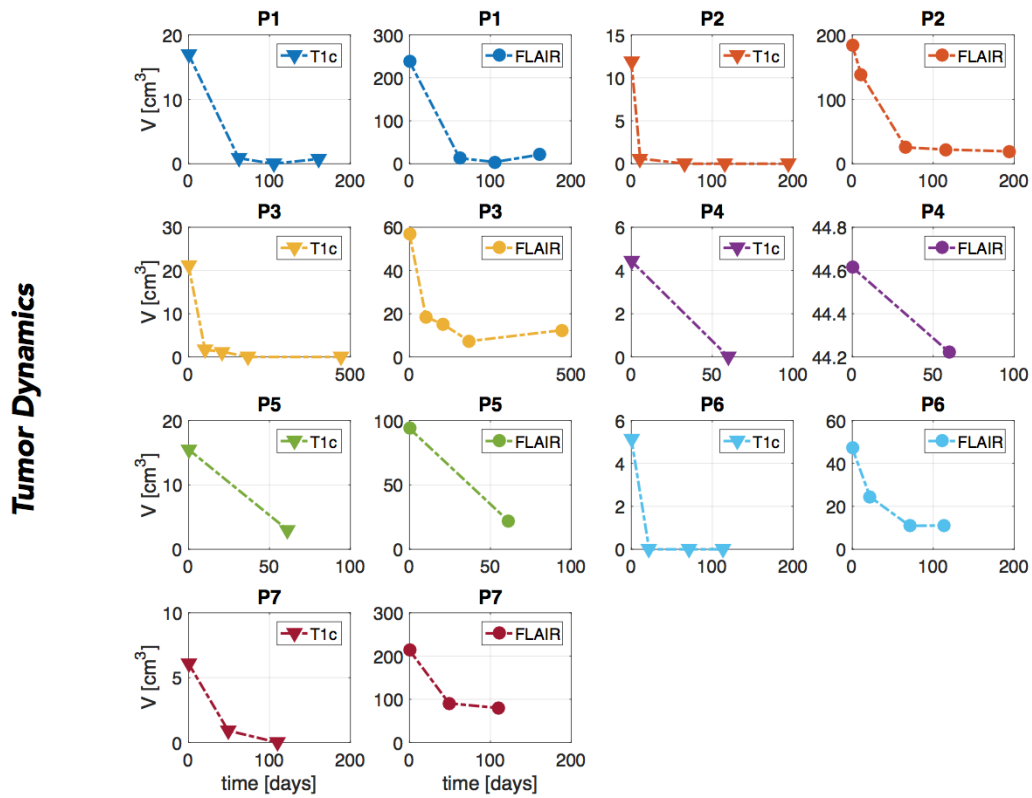
Supplemental Figure 2

**Supplemental Figure 2.** Timeline of conducted therapies and timing of MRI.

Depicted are the conducted therapies in correlation to MRI over the time of treatment in the 7 patients included in the computed analysis. The timepoint of each MRI is indicated by a black arrow.

R-MP: rituximab (d1, d15, d29), methotrexate (d2, d16, d30), procarbazine (d2-d11), every 43 days; R-MTX: rituximab (d0); methotrexate (d1); q21; R-MTX/Ara-C/Thiotepa: rituximab (d0, d5), methotrexate (d1), cytarabine (d2, d3), thiotepa (d4), every 21 days; HD-BCNU/Thiotepa + autoSCT: high-dose BCNU (d-6), thiotepa (d-5, d-4), autologous stem cell transplantation (d0); R-DEVIC: rituximab (d0), dexamethasone (d1-3), carboplatin (d1), ifosfamide (d1-3), etoposide (d1-3), every 21 days; Sx: surgery.

Supplemental Figure 3



Supplemental Figure 3. Tumor dynamics upon treatment determined by MRI.

Change in tumour volume [cm³] visible in T1c and FLAIR scan over time [days] is reported for each patient. With exception of P1, who has reported recurrence in the last time point, all cases show decrease in T1c enhanced tumour volume. Similar tumor reduction is observed for FLAIR scans.