

Table S1 SIDE analysis

| Comparison | k | prop | Network meta-analysis | Direct | Indirect | Difference | z | P value |
|--|---|------|-----------------------|--------|----------|------------|-------|---------|
| Immunotherapy:Immunotherapy + Targeted Therapy | 2 | 0.83 | -0.49 | -0.44 | -0.73 | 0.28 | 0.22 | 0.82 |
| Immunotherapy:Intrathecal Therapy | 1 | 0.7 | 0.78 | 0.88 | 0.56 | 0.32 | 0.45 | 0.65 |
| Immunotherapy:Radiotherapy | 1 | 0.76 | 0.4 | 0.41 | 0.38 | 0.03 | 0.04 | 0.97 |
| Immunotherapy:Systemic Therapy | 1 | 0.7 | 0.75 | 0.54 | 1.24 | -0.7 | -1.01 | 0.31 |
| Immunotherapy:Systemic Therapy + Radiotherapy | 0 | 0 | 2.03 | - | 2.03 | - | - | - |
| Immunotherapy:Targeted Therapy | 2 | 0.95 | 0.93 | 0.88 | 1.98 | -1.1 | -0.8 | 0.42 |
| Immunotherapy + Targeted Therapy:Intrathecal Therapy | 0 | 0 | 1.27 | - | 1.27 | - | - | - |
| Immunotherapy + Targeted Therapy:Radiotherapy | 0 | 0 | 0.89 | - | 0.89 | - | - | - |
| Immunotherapy + Targeted Therapy:Systemic Therapy | 0 | 0 | 1.24 | - | 1.24 | - | - | - |
| Immunotherapy + Targeted Therapy:Systemic Therapy + Radiotherapy | 0 | 0 | 2.52 | - | 2.52 | - | - | - |
| Immunotherapy + Targeted Therapy:Targeted Therapy | 1 | 0.79 | 1.42 | 1.6 | 0.76 | 0.83 | 0.75 | 0.45 |
| Intrathecal Therapy:Radiotherapy | 1 | 0.81 | -0.38 | -0.47 | 0 | -0.47 | -0.73 | 0.47 |
| Intrathecal Therapy:Systemic Therapy | 2 | 0.99 | -0.03 | -0.05 | 1.79 | -1.84 | -1.06 | 0.29 |
| Intrathecal Therapy:Systemic Therapy + Radiotherapy | 0 | 0 | 1.24 | - | 1.24 | - | - | - |
| Intrathecal Therapy:Targeted Therapy | 1 | 0.8 | 0.15 | 0 | 0.77 | -0.77 | -1.19 | 0.23 |
| Radiotherapy:Systemic Therapy | 2 | 0.89 | 0.35 | 0.24 | 1.22 | -0.98 | -1.27 | 0.20 |
| Radiotherapy:Systemic Therapy + Radiotherapy | 1 | 0.79 | 1.63 | 2.02 | 0.15 | 1.87 | 1.06 | 0.29 |
| Radiotherapy:Targeted Therapy | 1 | 0.91 | 0.53 | 0.47 | 1.2 | -0.73 | -0.77 | 0.44 |
| Systemic Therapy:Systemic Therapy + Radiotherapy | 1 | 0.79 | 1.28 | 0.89 | 2.78 | -1.89 | -1.06 | 0.29 |
| Systemic Therapy:Targeted Therapy | 1 | 0.81 | 0.18 | 0.34 | -0.46 | 0.8 | 1.25 | 0.21 |
| Targeted Therapy:Systemic Therapy + Radiotherapy | 0 | 0 | 1.09 | - | 1.09 | - | - | - |

Table S2 Fixed-effect model analysis

| Treatment | Hazard ratio [95% CI] | z | P value |
|----------------------------------|-----------------------|------|---------|
| Immunotherapy | 0.86 [-0.11; 1.82] | 1.74 | 0.08 |
| Immunotherapy + Targeted Therapy | 1.37 [-1.26; 4.00] | 1.02 | 0.31 |
| Intrathecal Therapy | 0.10 [-0.32; 0.52] | 0.47 | 0.64 |
| Radiotherapy | 0.38 [-0.16; 0.92] | 1.39 | 0.16 |
| Systemic therapy | 0.11 [-0.25; 0.46] | 0.59 | 0.56 |
| Systemic therapy + radiotherapy | - | - | - |
| Targeted therapy | 0.07 [-0.41; 0.55] | 0.29 | 0.77 |

| | Systemic Therapy + Radiotherapy | Targeted Therapy | Intrathecal Therapy | Systemic Therapy | Radiotherapy | Immunotherapy | Immunotherapy + Targeted Therapy |
|----------------------------------|---------------------------------|------------------|---------------------|------------------|--------------|---------------|----------------------------------|
| Systemic Therapy + Radiotherapy | | . | . | -0.89 | -2.02 | . | . |
| Targeted Therapy | -1.09 | | 0 | -0.34 | -0.47 | -0.88 | -1.6 |
| Intrathecal Therapy | -1.24 | -0.15 | | -0.05 | -0.47 | -0.88 | . |
| Systemic Therapy | -1.28 | -0.18 | -0.03 | | -0.24 | -0.54 | . |
| Radiotherapy | -1.63 | -0.53 | -0.38 | -0.35 | | -0.41 | . |
| Immunotherapy | -2.03 | -0.93 | -0.78 | -0.75 | -0.4 | | -0.44 |
| Immunotherapy + Targeted Therapy | -2.52 | -1.42 | -1.27 | -1.24 | -0.89 | -0.49 | |

Figure S1 Net league table of comparisons.