**Table C:**

**Treatment Outcomes of Cyberknife specific by tumors' location**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Location** | **Tumor type** | **Tumour size** | **Length of Followup (Months)** | **Total dose (Gy)** | **Effectiveness result** | **Safety result** |
| Intracranial [1,2,5, 9, 14] | single brain metastases, perioptic lesions, Pituitary adenomas, cerebral metastases, Active acromegaly, vestibular schwannoma, glomus tumors of temporal bone | 0.02-19.8 cm3 | 2-120 | 14-25 | LC: 92-100%; improvement in sight: 16-45%; hormone level improvement: 44.4-100%; hearing preservation:79.1% | adverse radiation reactions: 19.2%; trigeminal neuropathy, facial neuropathy, brainstem of cerebellar edema: 1.8-2% |
| Spine [2, 4, 6, 8] | spinal tumors, spinal metastases, central nervous system hemangioblastoma, spinal arteriovenous malformations | 0.12-0.26cm3 | 2-54.3 | 12.6-30.6 | LC:73-100%; pain improvement: 25-100%; progression-free survival: 86-100% | vertebral compression fractures, symptomatic myelopathy happen:6.7-8.5% |
| Chest/Lung [1,2,17] | breast cancer primary and spine metastases, non-resectable primary lung tumors and metastases, after pneumonectomy | - | 2-48 | 10-30.6 | LC (received ＜20 Gy): 54-73.9%; LC (received ＞20 Gy): 91-1005 | NS |
| Digestive organ [2,11,18] | pancreatic tumors, colorectal cancer liver metastases, liver malignancies | 0.7-10 cm | 2-48 | 12.6-60 | LC: 40-97.1%; OS: 38-95.2% | NR |
| Urogenital tumors [3, 7,12, 13, 16] | prostate cancer, cervix cancer | - | 4-56 | 16-50 | LC: 75-100%; bPFS: 81-100%; actuarial freedom from biochemical failure: 92.7-100% | acute urine/rectal toxicity: 3-42%; late urine/rectal toxicity: 3-32%; late grade ≥3 GI/GU toxicity: 0-5.5% |
| Non-cancer diseases [2, 10, 15] | trigeminal neuralgia, arterio-venous malformations | - | 2-48 | 18-80.5 | pain control: 40-92.7%; reduction of MAV: 33% | recurrence of pain: 13.7-33%; hypesthesia rate: 11.8-51.2% |

Gy, Gray; bPFS, biochemical progression-free survival; PFS, progression-free survival; LC, local control; OS, overall survival; MAV, malformations of arterio-venous; GI, gastrointestinal; GU, genitourinary; NR, not reported; NS, not specific.

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