

Table S1 Baseline characteristics of the 67 cases

| Case | Age (years)/ gender | Bones involved | Pleural effusion or chylothorax | Therapy protocol | Follow-up time (months) | Outcome |
|-------------------------------------|------------------------|---|------------------------------------|---|----------------------------|-------------|
| 1981 (case1) Le XX <i>et al.</i> | 29/M | Left humerus | | Reconstruction using prostheses | 48 | Controlled |
| 1981 (case2) Le XX <i>et al.</i> | 43/M | Clavicles, ribs, sternum, cervical vertebrae | | Reconstruction using bone grafts | 18 | Died |
| 1982 (case1) Zhou KR <i>et al.</i> | 18/F | Ribs | | Radiation | 12 | Controlled |
| 1982 (case2) Zhou KR <i>et al.</i> | 25/M | Ribs | | Resection of the lesion | 24 | Progression |
| 1985 (case1) Qu H <i>et al.</i> | 18/M | Cavicle, sapula, left humerus | Chylothorax | N/A | 6 | Progression |
| 1985 (case2) Qu H <i>et al.</i> | 27/F | Right ilium, acetabulum, cacroiliac joint | Pleural effusion | N/A | N/A | N/A |
| 1986 (case1) Zhang WM <i>et al.</i> | 28/M | Femur | | Radiation (57 Gy) | 60 | Progression |
| 1986 (case2) Zhang WM <i>et al.</i> | 24/M | Right tibiofibula | | Reconstruction using prostheses | 48 | Controlled |
| 1986 (case3) Zhang WM <i>et al.</i> | 29/M | Left ribs | Pleural effusion | Cyclophosphamide+fluorouracil | 22 | Progression |
| 1989 He JY <i>et al.</i> | 19/F | Ilium, femur, ischium, pubis, sacrococeyx | | N/A | N/A | N/A |
| 1991 Zhang GL <i>et al.</i> | 33/F | Left femur | | N/A | 12 | Progression |
| 1991 (case1) Han X <i>et al.</i> | 11/F | Tibia, femur | | Reconstruction using bone grafts | 2 | Progression |
| 1991 (case2) Han X <i>et al.</i> | 18/M | Clavicle, scapula, humerus | Chylothorax | Thoracic duct ligation +chest drainage | 3 | Controlled |
| 1993 Wu YT <i>et al.</i> | 23/M | Mandible | | Reconstruction using prostheses | 18 | Controlled |
| 1993 (case1) Liu SZ <i>et al.</i> | 19/F | Ischium, pubis | | N/A | N/A | N/A |
| 1993 (case2) Liu SZ <i>et al.</i> | 17/M | Ulna, radius | | Radiation | 72 | Progression |
| 1994 Liang JG <i>et al.</i> | 61/F | Right scapula, right clavicle | | Resection of the lesion | N/A | N/A |
| 1994 Yang JP <i>et al.</i> | 36/M | Right femur | | Resection of the lesion | N/A | N/A |
| 1994 (case1) Wang H <i>et al.</i> | 54/M | Right ilium, right femur | | N/A | 26 | Progression |
| 1994 (case2) Wang H <i>et al.</i> | 25/M | Left tibiofibula, ankle joint, foot | | Reconstruction using prostheses | 12 | Controlled |
| 1995 Li K <i>et al.</i> | 43/F | Mandible | | N/A | N/A | N/A |
| 1996 Huang Q <i>et al.</i> | 24/M | Right ilium, cacroiliac joint | | radiation | 8 | Controlled |
| 1996 Jiang CL <i>et al.</i> | 30/F | Ribs, sacrum, lumbar vertebrae, thoracic vertebrae | | N/A | 102 | Progression |
| 1997 Li JF <i>et al.</i> | 15/M | Radius, foot | | Reconstruction using prostheses | 15 | Controlled |

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|------------------------------------|-------|--|-------------|-------------------------------------|-----|-------------|
| 1998 Bai BC <i>et al.</i> | 23/M | Femur, ilium | | Calcium salts+vitamin D | 72 | Controlled |
| 1998 Yang YY <i>et al.</i> | 25/M | Right hip bone | | Resection of the lesion | N/A | N/A |
| 2000 Feng XM <i>et al.</i> | 33/M | Cervical vertebrae | | Resection of the lesion | N/A | N/A |
| 2000 Zhou ZB <i>et al.</i> | 21/M | Pubis, femur, ischium, hip bone, tibia, lumbar vertebrae, sacral vertebrae | | N/A | 204 | Progression |
| 2000 (case1) Zhao ZQ <i>et al.</i> | 37/F | Left scapula, left clavicle | chylothorax | N/A | 18 | Progression |
| 2000 (case2) Yang XL <i>et al.</i> | 63/M | Hip bone, lumbar vertebrae | | N/A | N/A | N/A |
| 2000 (case2) Zhao ZQ <i>et al.</i> | 25/M | Metatarsal bones | | Resection of the lesion | N/A | N/A |
| 2000 (case3) Zhao ZQ <i>et al.</i> | 14/M | Right scapula | | N/A | N/A | N/A |
| 2000 (case4) Zhao ZQ <i>et al.</i> | 41/M | Right ilium | | N/A | 24 | Controlled |
| 2001 Chang LC <i>et al.</i> | 9/M | Right ulna | | N/A | N/A | N/A |
| 2001 Wang TS <i>et al.</i> | 19/F | Mandible | | N/A | N/A | N/A |
| 2001 Zeng S <i>et al.</i> | 15/M | Scapula, clavicle, os petrosum, occipital bone | Chylothorax | Vitamin B complex+interferon | 2 | Controlled |
| 2001 (case1) Yang XL <i>et al.</i> | 65/M | Maxilla, frontal bone, temporal bone, occipital bone | | N/A | N/A | N/A |
| 2002 Li HC <i>et al.</i> | 17/M | Right clavicle | Chylothorax | Thoracic duct ligation+ pleurodesis | 12 | Controlled |
| 2002 Qiu DS <i>et al.</i> | 68/M | Maxilla, os orbitale, frontal bone, temporal bone, parietal bone | | Radiation | 24 | Controlled |
| 2002 Yao YR <i>et al.</i> | 5/M | Tibia | | N/A | 24 | Progression |
| 2003 (case1) Liu F <i>et al.</i> | 40/M | Femur | | Reconstruction using prostheses | N/A | N/A |
| 2003 (case2) Liu F <i>et al.</i> | 16/M | Right femur | | Reconstruction using bone grafts | 12 | Progression |
| 2004 Jin HM <i>et al.</i> | 23/F | Acetabulum, femur | | N/A | N/A | N/A |
| 2004 Pei FX <i>et al.</i> | 18/F | Ischium | | N/A | N/A | N/A |
| 2004 Shou YM <i>et al.</i> | 16/M | Ribs, thoracic vertebrae, lumbar vertebrae | Chylothorax | Chest drainage+radiation | 4 | Controlled |
| 2004 Wang G <i>et al.</i> | 8/M | Clavicle, ilium, ribs, bones of cranium | Chylothorax | Pleurodesis+chest drainage | 12 | Progression |
| 2004 Yu HC <i>et al.</i> | 32/F | Ribs, thoracic vertebrae | | N/A | N/A | N/A |
| 2005 Li B <i>et al.</i> | 12/F | Right femur | | N/A | N/A | N/A |
| 2005 Liu XX <i>et al.</i> | 20/M | Pubis, ischium, acetabulum | | Resection of the lesion | N/A | N/A |
| 2005 Xue W <i>et al.</i> | 1.5/M | Left femur | | Interferon | N/A | N/A |
| 2006 Chen Z <i>et al.</i> | 12/F | Femur | | Reconstruction using prostheses | N/A | N/A |

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| 2006 Hu RF <i>et al.</i> | 32/F | Right ribs | | Resection of the lesion | 36 | Controlled |
| 2007 HE MY <i>et al.</i> | 37/F | Temporal bone, parietal bone | | N/A | N/A | N/A |
| 2007 Liu XY <i>et al.</i> | 14/M | Radius | | Radiation (50Gy) | 12 | Controlled |
| 2007 Wang YH <i>et al.</i> | 51/M | Mandible | | Resection of the lesion | N/A | N/A |
| 2008 Chen HP <i>et al.</i> | 26/F | Scapula, femur | | N/A | N/A | N/A |
| 2008 Liao GQ <i>et al.</i> | 20/F | Maxilla, mandible, zygomatic bone | | Resection of the lesion | N/A | N/A |
| 2008 Xin LW <i>et al.</i> | 19/F | Pubis, femur | | Diphosphonate | 6 | Controlled |
| 2008 Yu XX <i>et al.</i> | 25/M | Clavicle, ribs | Chylothorax | Cyclophosphamide+fluorouracil | N/A | N/A |
| 2008 Zhong LP <i>et al.</i> | 31/M | Maxilla, mandible, omatic bone | | Resection of the lesion | 10 | Progression |
| 2009 Mou YK <i>et al.</i> | 71/M | Clavicle | | Calcitonin salmon+alendronate sodium | 10 | Controlled |
| 2009 Wang YJ <i>et al.</i> | 59/F | Left humerus | | Reconstruction using prostheses | 10 | Controlled |
| 2009 Xing L <i>et al.</i> | 45/F | Bones of upper limb | | Resection of the lesion+ radiation (30.6 Gy) | 24 | Controlled |
| 2009 Zhang J <i>et al.</i> | 40/M | Cranium | | Resection of the lesion | 12 | Controlled |
| 2010 Liang P <i>et al.</i> | 29/M | Tibiofibula, femur , ankle joint,foot | | Resection of the lesion | 12 | Controlled |
| 2010 Luo Y <i>et al.</i> | 16/F | Ilium, pubis, femur, humerus, scapula, tibiofibula, clavicle | | N/A | N/A | N/A |
| 2010 Xu HJ <i>et al.</i> | 29/M | Metacarpal bones, phalanges of fingers | | N/A | N/A | N/A |

F: female; M: male; N/A: not available; Controlled: the radiographic presentation of the affected bone hadn't changed, and no newly emerging bone destruction; Progression: progressive resorption of the affected bone and/or newly emerging bone destruction