**Table S1**

 The clinicopathological characteristics of 89 clinical samples in TMA

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sample ID | Status | Survival time (months) | Gender | Age (years) | Tumor size (cm) | AJCC stage |
| 1454 | Alive | 64 | Male | 72 | 6.5 | IIA |
| 1455 | Dead | 1 | Female | 57 | 6.5 | IIIA |
| 1456 | Dead | 13 | Male | 76 | 5.5 | IIA |
| 1458 | Alive | 64 | Female | 63 | 4.5 | IIA |
| 1461 | Alive | 63 | Female | 78 | 7 | IIIC |
| 1462 | Dead | 22 | Male | 78 | 8 | IV |
| 1464 | Dead | 7 | Male | 63 | 5.5 | IIIC |
| 1502 | Alive | 63 | Female | 68 | 6 | IIA |
| 1503 | Alive | 63 | Male | 39 | 6 | IIB |
| 1504 | Dead | 23 | Male | 68 | 5.5 | I |
| 1505 | Alive | 63 | Male | 62 | 2.5 | IIA |
| 1508 | Alive | 63 | Male | 78 | 5 | IIA |
| 1510 | Dead | 44 | Female | 50 | 4 | IIB |
| 1556 | Alive | 62 | Male | 73 | 11 | IIA |
| 1557 | Dead | 38 | Male | 68 | 6 | IIB |
| 1558 | Dead | 13 | Female | 87 | 6 | IIIC |
| 1559 | Dead | 8 | Female | 52 | 7 | IIB |
| 1560 | Alive | 62 | Female | 51 | 2.7 | I |
| 1561 | Dead | 56 | Male | 55 | 3.5 | IIIC |
| 1562 | Dead | 17 | Male | 73 | 6.5 | IV |
| 1563 | Alive | 62 | Female | 61 | 3 | IIA |
| 1564 | Dead | 12 | Female | 48 | 1.5 | IIA |
| 1565 | Alive | 62 | Female | 59 | 3 | I |
| 1566 | Dead | 40 | Female | 77 | 4 | I |
| 1567 | Dead | 42 | Male | 78 | 5 | IIIB |
| 1570 | Alive | 62 | Male | 31 | 4 | IIIB |
| 1571 | Dead | 33 | Female | 79 | 7 | IIA |
| 1572 | Alive | 61 | Male | 81 | 4 | IIIB |
| 1573 | Alive | 61 | Male | 85 | 4.3 | IIA |
| 1574 | Dead | 40 | Male | 90 | 7 | IIB |
| 1576 | Alive | 61 | Female | 70 | 4.5 | I |
| 1577 | Dead | 23 | Female | 66 | 5 | IIIC |
| 1579 | Alive | 61 | Male | 73 | 3.5 | IIA |
| 1614 | Alive | 61 | Female | 54 | 3.5 | IIA |
| 1615 | Alive | 61 | Male | 50 | 4 | I |
| 1616 | Alive | 61 | Female | 74 | 5 | IIA |
| 1617 | Alive | 61 | Male | 80 | 8 | IIA |
| 1619 | Alive | 61 | Female | 65 | 4 | IIA |
| 1620 | Alive | 61 | Female | 59 | 4.5 | IIA |
| 1622 | Alive | 61 | Male | 79 | 4 | IIA |
| 1624 | Dead | 13 | Female | 76 | 3.5 | IIIB |
| 1625 | Alive | 60 | Female | 76 | 8 | IIA |
| 1626 | Dead | 39 | Male | 63 | 5 | IIIB |
| 1628 | Dead | 25 | Female | 76 | 8 | IIIB |
| 1629 | Alive | 61 | Male | 56 | 4 | IIA |
| 1630 | Alive | 60 | Female | 44 | 8 | I |
| 1663 | Dead | 13 | Male | 73 | 5.5 | IIA |
| 1668 | Alive | 60 | Female | 66 | 7.5 | IIIA |
| 1669 | Dead | 1 | Female | 48 | 8 | IIA |
| 1732 | Alive | 59 | Male | 79 | 6 | IIA |
| 1733 | Alive | 59 | Male | 55 | 5 | IIIB |
| 1735 | Alive | 59 | Female | 65 | 4 | IIA |
| 1740 | Dead | 7 | Female | 73 | 8 | IIIB |
| 1741 | Alive | 59 | Male | 81 | 8 | IIIB |
| 1742 | Alive | 59 | Male | 61 | 4.5 | I |
| 1743 | Dead | 16 | Male | 65 | 6 | IIIC |
| 1744 | Dead | 16 | Male | 61 | 4 | IV |
| 1745 | Alive | 59 | Male | 80 | 4 | IIA |
| 1756 | Alive | 58 | Female | 71 | 3 | IIIB |
| 1758 | Alive | 58 | Female | 55 | 11 | IIA |
| 1762 | Alive | 58 | Female | 69 | 8 | IIB |
| 1764 | Alive | 58 | Female | 80 | 6 | IIIB |
| 1765 | Dead | 21 | Male | 55 | 4 | IIB |
| 1767 | Alive | 58 | Male | 83 | 5 | IIA |
| 1811 | Alive | 57 | Male | 73 | 7 | IIB |
| 1813 | Alive | 57 | Female | 82 | 4 | IIIB |
| 1814 | Alive | 57 | Female | 69 | 2 | I |
| 1815 | Alive | 57 | Female | 46 | 6 | IIA |
| 1819 | Alive | 57 | Female | 56 | 4.5 | IIA |
| 1820 | Alive | 56 | Female | 78 | 4.5 | IIA |
| 1836 | Alive | 56 | Female | 81 | 6 | IIB |
| 1839 | Alive | 56 | Male | 73 | 5 | IIB |
| 1841 | Alive | 56 | Female | 50 | 6 | IIA |
| 1904 | Dead | 19 | Female | 27 | 4 | IIIC |
| 1907 | Dead | 35 | Male | 54 | 5 | IIA |
| 1914 | Alive | 55 | Female | 77 | 5 | IIIB |
| 1915 | Alive | 55 | Female | 55 | 9 | IIIB |
| 1917 | Alive | 55 | Male | 66 | 2.7 | I |
| 1918 | Dead | 42 | Male | 60 | 3.5 | IIIC |
| 1919 | Dead | 19 | Male | 65 | 5 | IIIB |
| 1921 | Dead | 15 | Male | 56 | 6 | IIIB |
| 1923 | Alive | 55 | Male | 54 | 6.5 | IIIB |
| 1927 | Dead | 19 | Male | 67 | 6 | IIIB |
| 1928 | Alive | 55 | Female | 52 | 5.5 | I |
| 1929 | Dead | 23 | Female | 62 | 5 | IIIB |
| 1990 | Alive | 57 | Male | 43 | 4 | IIA |
| 1991 | Alive | 57 | Male | 83 | 4 | IIB |
| 1992 | Alive | 56 | Male | 66 | 4 | IIA |
| 1993 | Dead | 0 | Male | 82 | 7 | IIIC |