**Supplementary Table 1**, The quality control of HCC cancer report in Shanghai

|  |  |  |  |
| --- | --- | --- | --- |
|  Year Diagnosis | DCO | D/C | HV |
| N | ％ | N | ％ | N | ％ |
|  1973 | 386 | 29.58  | 1305/1282 | 0.97  | 179 | 13.72  |
| 1974 | 571 | 38.32  | 1490/1391 | 0.93  | 139 | 9.33  |
| 1975 | 649 | 42.61  | 1523/1500 | 0.98  | 88 | 5.78  |
| 1976 | 688 | 46.11  | 1492/1492 | 0.99  | 181 | 12.13  |
| 1977 | 649 | 46.09  | 1408/1405 | 0.99  | 140 | 9.94  |
| 1978 | 740 | 43.81  | 1689/1688 | 1.01  | 167 | 9.89  |
| 1979 | 503 | 33.56  | 1499/1595 | 1.04  | 146 | 9.74  |
| 1980 | 578 | 41.67  | 1387/1526 | 1.08  | 134 | 9.66  |
| 1981 | 627 | 42.97  | 1459/1463 | 1.00  | 117 | 8.02  |
| 1982 | 717 | 46.26  | 1550/1489 | 0.97  | 117 | 7.55  |
| 1983 | 730 | 47.22  | 1546/1578 | 1.02  | 125 | 8.09  |
| 1984 | 725 | 44.78  | 1619/1589 | 0.96  | 130 | 8.03  |
| 1985 | 800 | 46.14  | 1734/1675 | 0.95  | 133 | 7.67  |
| 1986 | 840 | 47.57  | 1766/1713 | 0.96  | 145 | 8.21  |
| 1987 | 890 | 49.67  | 1792/1804 | 1.00  | 150 | 8.37  |
| 1988 | 204 | 11.54  | 1767/1666 | 0.93  | 344 | 19.47  |
| 1989 | 72 | 4.14  | 1740/1739 | 0.97  | 199 | 11.44  |
| 1990 | 77 | 4.20  | 1834/1746 | 0.92  | 239 | 13.04  |
| 1991 | 14 | 0.82  | 1703/1794 | 1.07  | 225 | 13.21  |
| 1992 | 1 | 0.06  | 1762/1832 | 1.00  | 262 | 14.87  |
| 1993 | 0 | 0.00  | 1613/1657 | 1.00  | 213 | 13.21  |
| 1994 | 0 | 0.00  | 1677/1599 | 0.96  | 211 | 12.58  |
| 1995 | 0 | 0.00  | 1582/1568 | 1.00  | 191 | 12.09  |
| 1996 | 0 | 0.00  | 1606/1613 | 1.00  | 215 | 13.42  |
| 1997 | 0 | 0.00  | 1570/1518 | 0.95  | 211 | 13.44  |
| 1998 | 6 | 0.35  | 1710/1571 | 0.90  | 249 | 14.56  |
| 1999 | 0 | 0.00  | 1677/1519 | 0.89  | 252 | 15.03  |
| 2000 | 0 | 0.00  | 1631/1522 | 0.94  | 235 | 14.41  |
| 2001 | 1 | 0.06  | 1586/1521 | 0.93  | 283 | 17.84  |
| 2002 | 1 | 0.05  | 1838/1601 | 0.87  | 346 | 18.82  |
| 2003 | 1 | 0.06  | 1682/1466 | 0.85  | 344 | 20.45  |
| 2004 | 3 | 0.16  | 1832/1422 | 0.77  | 398 | 21.72  |
| 2005 | 2 | 0.11  | 1832/1417 | 0.78  | 394 | 21.51  |
| 2006 | 2 | 0.11  | 1804/1508 | 0.83  | 407 | 22.56  |
| 2007 | 2 | 0.11  | 1769/1537 | 0.84  | 425 | 24.02  |
| 2008 | 2 | 0.11  | 1821/1565 | 0.85  | 452 | 24.82  |
| 2009 | 0 | 0.00  | 1748/1566 | 0.91  | 469 | 26.83  |
| 2010 | 0 | 0.00  | 1757/1442 | 0.82  | 528 | 30.05  |
| 2011 | 1 | 0.06  | 1679/1458 | 0.85  | 491 | 29.24  |
| 2012 | 0 | 0.00  | 1557/1402 | 0.90  | 465 | 29.87  |
| 2013 | 138 | 0.08 | 1426/1705 | 0.84 | 642 | 37.65 |

**Supplementary Figure 1**



|  |  |
| --- | --- |
|  **Year**  |  **HCC** |
| **Male** | **Female** |
| **1973** | **33.38**  | **11.65**  |
| **1974** | **35.28**  | **13.22**  |
| **1975** | **37.07**  | **11.72**  |
| **1976** | **35.06**  | **12.47**  |
| **1977** | **33.36**  | **10.60**  |
| **1978** | **38.55**  | **13.54**  |
| **1979** | **33.45**  | **10.75**  |
| **1980** | **29.25**  | **9.56**  |
| **1981** | **29.96**  | **10.80**  |
| **1982** | **30.56**  | **10.98**  |
| **1983** | **29.54**  | **10.58**  |
| **1984** | **30.24**  | **10.96**  |
| **1985** | **30.21**  | **10.45**  |
| **1986** | **29.85**  | **10.11**  |
| **1987** | **29.57**  | **10.30**  |
| **1988** | **27.56**  | **10.57**  |
| **1989** | **29.21**  |  **9.87**  |
| **1990** | **29.04**  |  **9.89**  |
| **1991** | **25.23**  |  **8.86**  |
| **1992** | **24.91**  |  **8.72**  |
| **1993** | **23.48**  |  **8.48**  |
| **1994** | **25.59**  |  **9.02**  |
| **1995** | **24.06**  |  **8.24**  |
| **1996** | **23.63**  |  **8.40**  |
| **1997** | **23.12**  |  **8.63**  |
|  **1998** | **26.43**  |  **8.70**  |
| **1999** | **26.46**  | **7.93**  |
|  **2000** | **25.26**  |  **8.25**  |
| **2001** | **24.02**  |  **7.99**  |
| **2002** | **27.62**  |  **8.91**  |
| **2003** | **21.40**  |  **6.53**  |
| **2004** | **23.47**  |  **7.61**  |
| **2005** | **22.04**  |  **7.89**  |
| **2006** | **22.18**  |  **7.29**  |
| **2007** | **20.44**  |  **6.76**  |
| **2008** | **22.44**  |  **6.89**  |
| **2009** | **21.34**  |  **6.93**  |
| **2010** | **18.51**  |  **5.93**  |
| **2011** | **17.53**  |  **5.27**  |
| **2012** | **16.63** |  **5.99** |
| **2013** | **18.39**  | **6.14** |
| **2014** | **17.34**  | **5.60** |
|  |  |  |

**Supplementary Table 2**, incidences (ASRs, 1/100, 000) of HCC from 1973 to 2014 in Shanghai

**Supplementary Table 3**, incidences (1/100,000) of different types of hepatitis from 1973 to 2014 in Shanghai

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  Year | **Hepatitis in total** | **HAV** | **HBV** | **HCV** | **HEV** | **unclassified** |
| **2000** | 83.41 | 9.03 | 23.09 | 1.13 | 5.48 | 44.67 |
| **2001** | 81.83 | 10.95 | 20.33 | 1.65 | 5.21 | 43.68 |
| **2002** | 48.43 | 5.78 | 19.83 | 0.83 | 3.58 | 19.41 |
| **2003** | 70.09 | 7.29 | 25.73 | 1.21 | 4.11 | 31.76 |
| **2004** | 69.06 | 3.7 | 26.53 | 1.02 | 3.88 | 33.92 |
| **2005** | 42.37 | 2.45 | 16.85 | 0.99 | 4.24 | 17.84 |
| **2006** | 37.92 | 2.41 | 16.22 | 1.42 | 3.12 | 14.75 |
| **2007** | 26.99 | 2.1 | 14.03 | 1.42 | 2.54 | 6.91 |
| **2008** | 22.02 | 1.69 | 12.74 | 1.8 | 2.49 | 3.3 |
| **2009** | 19.21 | 1.31 | 11.08 | 1.81 | 2.71 | 2.3 |
| **2010** | 15.52 | 0.92 | 7.88 | 1.89 | 3.05 | 1.79 |
| **2011** | 11.39 | 0.83 | 5.93 | 0.63 | 2.71 | 1.29 |
| **2012** | 9.66 | 0.66 | 4.96 | 0.66 | 2.1 | 1.28 |
| **2013** | 8.39 | 0.55 | 4.2 | 0.51 | 1.9 | 1.23 |
| **2014** | 7.11 | 0.83 | 3.24 | 0.22 | 1.96 | 0.87 |