

**Hepatocellular carcinoma cell-derived small extracellular vesicle-associated CD147 serves as a diagnostic marker and promotes endothelial cell angiogenesis via the PI3K/Akt pathway**

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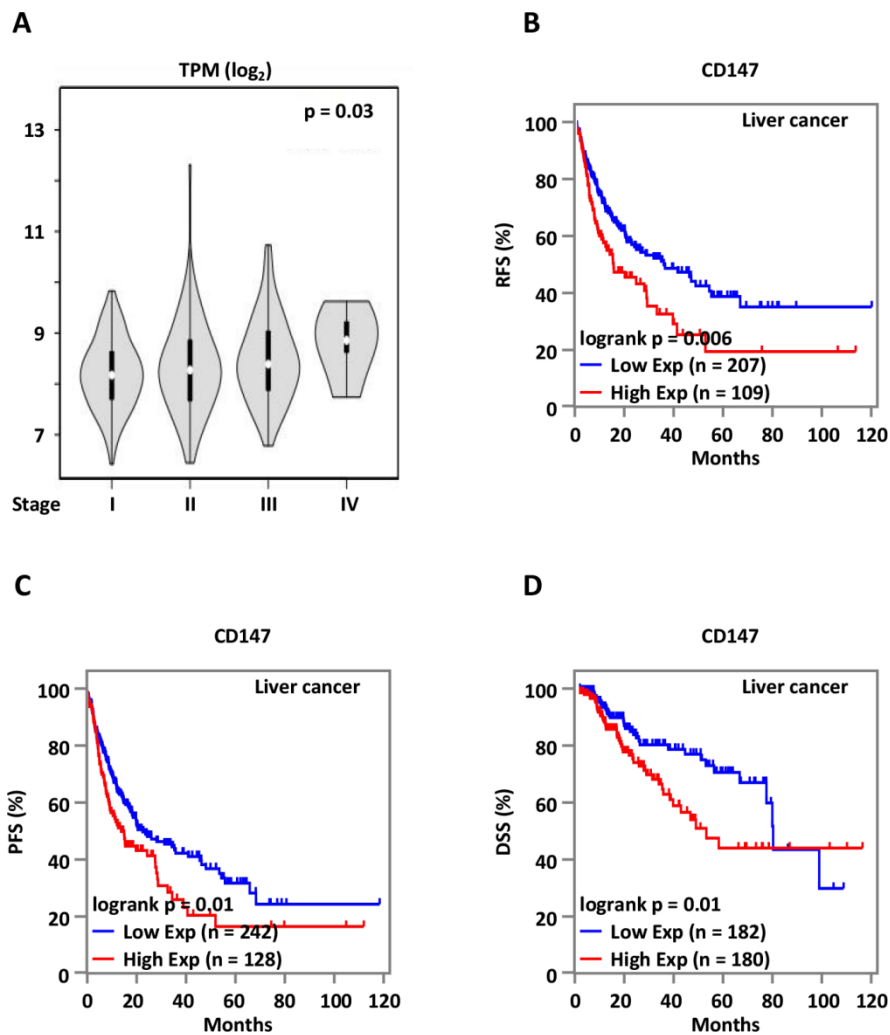
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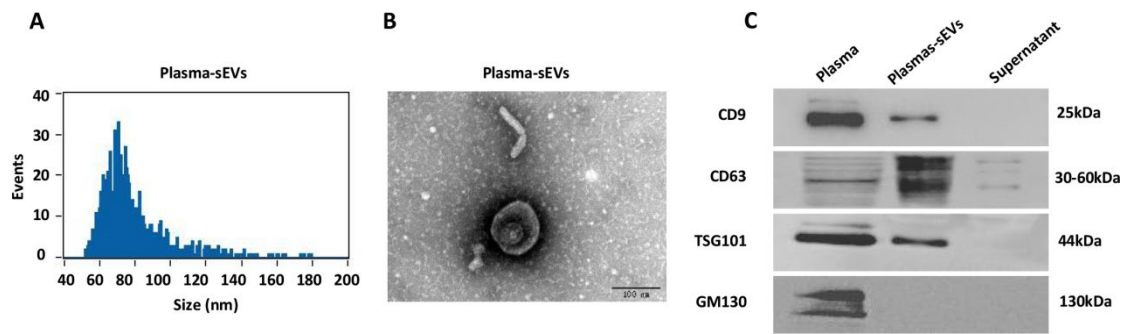
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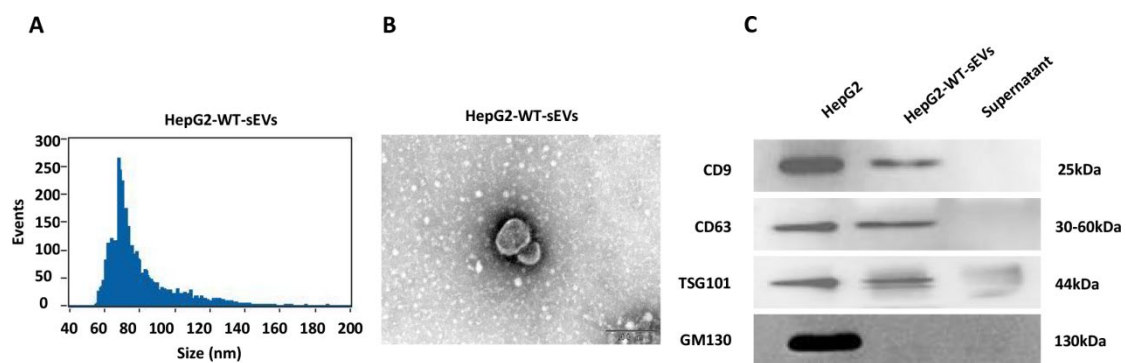
### Supplementary figure legends



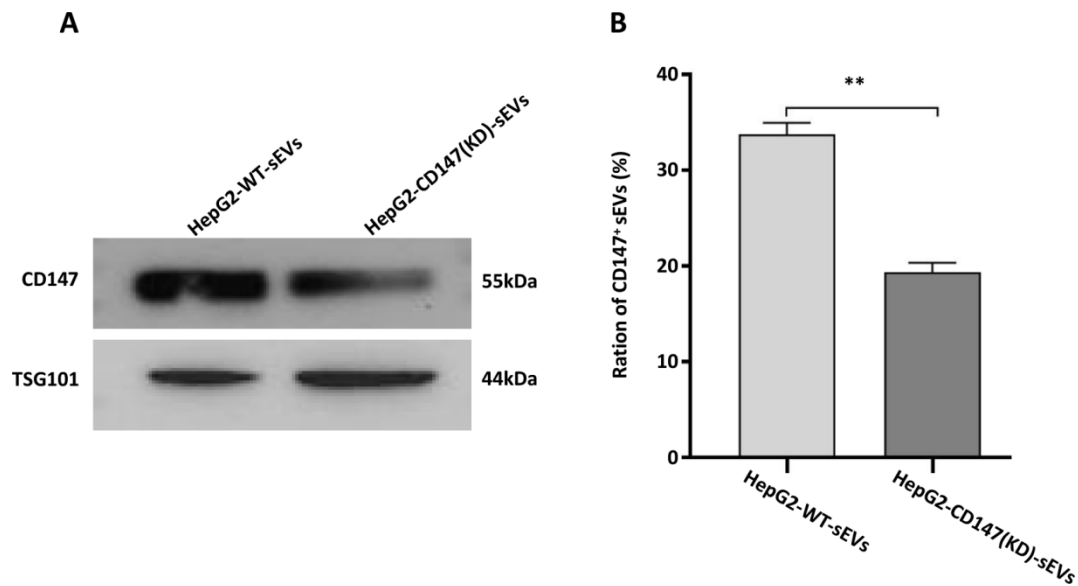
**Supplementary Figure 1.** High levels of CD147 are associated with liver tumorigenesis. Related to Figure 1. (A) The pathological stage plot (TPM, log<sub>2</sub>) of CD147 in a cohort of clinical liver cancer (n=369) samples from TCGA; (B-D) Kaplan Meier survival analyses for RFS (relapse-free survival) (B), PFS (progression-free survival) (C), and DSS (disease-specific survival) (D) of liver cancer using CD147 as input.



**Supplementary Figure 2.** Characterization of plasma-derived sEVs. Related to Figure 2. (A) Size of sEVs was measured by nano-flow cytometer (nFCM) analysis; (B) sEVs were captured by transmission electron microscope (TEM), Scale bar: 100  $\mu$ m; (C) Plasma, plasma-sEVs and supernatant were subjected to western blotting analysis, showing the presence of protein markers commonly associated with sEV subpopulations, e.g., CD9, CD63, and TSG101. GM130 (the Golgi protein) indicates that non-EV cellular components in cells.



**Supplementary Figure 3.** Characterization of HepG2-derived sEVs. Related to Figure 4. (A) Size of sEVs was measured by nano-flow cytometer (nFCM) analysis; (B) sEVs were captured by transmission electron microscope (TEM), Scale bar: 100  $\mu$ m; (C) HepG2 cells, HepG2-WT-sEVs, and supernatant were subjected to western blotting analysis, showing the presence of protein markers commonly associated with sEV subpopulations, e.g., CD9, CD63, and TSG101. GM130 (the Golgi protein) indicates that non-EV cellular components in cells.



**Supplementary Figure 4.** CD147 Stable Knockdown sEVs purified from HepG2 culture supernatants. Related to Figure 4. (A) sEVs from HepG2 cells infected with lentiviral shRNA specifically targeting CD147 (CD147 KD) were followed by western blotting using antibodies as indicated. Molecular weight is indicated on the right; (B) The related levels of CD147<sup>+</sup> sEVs isolated from culture supernatant of wild type (WT) or CD147 knockdown HepG2 cells (\*\*,  $P < 0.01$ ).

### Supplementary Tables

**Supplementary Table 1. Original information of healthy donors (HD)**

| NO. | Gender | Age (years) | CD147+sEVs (%) | AFP (ng/ml) |
|-----|--------|-------------|----------------|-------------|
| 1   | Male   | <50         | 8.4            | 1.79        |
| 2   | Female | ≥50         | 5.2            | 1.87        |
| 3   | Male   | <50         | 10.6           | 3.99        |
| 4   | Male   | <50         | 13.2           | 2.16        |
| 5   | Male   | <50         | 11.5           | 4.78        |
| 6   | Male   | <50         | 13             | 5.09        |
| 7   | Female | <50         | 9.8            | 3.42        |
| 8   | Male   | <50         | 10.1           | 2.59        |
| 9   | Male   | <50         | 13.1           | 1.32        |
| 10  | Male   | ≥50         | 9.1            | 2.68        |

|    |        |     |      |      |
|----|--------|-----|------|------|
| 11 | Female | <50 | 19.9 | 3.22 |
| 12 | Male   | <50 | 13.4 | 2.25 |
| 13 | Male   | <50 | 10.7 | 1.99 |
| 14 | Female | ≥50 | 12.2 | 3.68 |
| 15 | Male   | <50 | 11.2 | 2.00 |
| 16 | Male   | ≥50 | 11.1 | 0.96 |
| 17 | Male   | ≥50 | 6.6  | 2.03 |
| 18 | Male   | <50 | 0.8  | 5.24 |
| 19 | Female | ≥50 | 7.4  | 1.44 |
| 20 | Female | <50 | 14.3 | 1.66 |
| 21 | Female | ≥50 | 13.5 | 2.16 |
| 22 | Male   | <50 | 15.2 | 1.58 |
| 23 | Female | ≥50 | 12.8 | 3.66 |
| 24 | Female | <50 | 12   | 1.63 |
| 25 | Male   | <50 | 15.1 | 2.80 |
| 26 | Male   | <50 | 12.4 | 5.38 |
| 27 | Female | <50 | 11.9 | 1.53 |
| 28 | Female | <50 | 13.2 | 2.55 |
| 29 | Female | <50 | 14.7 | 3.51 |
| 30 | Male   | ≥50 | 8.1  | 1.23 |
| 31 | Male   | <50 | 9.4  | 2.11 |
| 32 | Male   | <50 | 13.7 | 1.39 |
| 33 | Female | <50 | 16.3 | 1.90 |
| 34 | Female | <50 | 8.9  | 1.12 |
| 35 | Female | <50 | 9.6  | 4.09 |
| 36 | Female | <50 | 14.9 | 2.32 |
| 37 | Female | <50 | 8.6  | 4.83 |
| 38 | Female | <50 | 12   | 2.74 |
| 39 | Male   | <50 | 9.9  | 1.59 |

|    |        |     |      |      |
|----|--------|-----|------|------|
| 40 | Male   | <50 | 10.8 | 4.32 |
| 41 | Female | <50 | 16.3 | 1.69 |
| 42 | Male   | <50 | 14.1 | 2.53 |
| 43 | Female | <50 | 6.9  | 2.64 |
| 44 | Male   | <50 | 9.3  | 4.9  |
| 45 | Female | <50 | 7.8  | 4.58 |
| 46 | Female | <50 | 10.1 | 1.34 |
| 47 | Male   | <50 | 9.2  | 2.64 |
| 48 | Male   | <50 | 8.9  | 3.02 |
| 49 | Female | <50 | 4.5  | 3.55 |
| 50 | Male   | <50 | 3.9  | 2.45 |
| 51 | Female | <50 | 10.4 | 1.54 |
| 52 | Male   | ≥50 | 12.1 | 2.00 |
| 53 | Female | <50 | 10.5 | 2.91 |
| 54 | Female | <50 | 10.5 | 1.53 |
| 55 | Female | <50 | 10.5 | 4.14 |
| 56 | Female | <50 | 6.1  | 1.52 |
| 57 | Male   | <50 | 12.3 | 3.32 |
| 58 | Female | <50 | 7.4  | 2.01 |
| 59 | Female | <50 | 10.4 | 7.90 |
| 60 | Male   | <50 | 3.6  | 3.66 |
| 61 | Male   | ≥50 | 12.4 | 6.89 |
| 62 | Male   | <50 | 7.3  | 2.07 |
| 63 | Female | <50 | 11.3 | 2.36 |
| 64 | Male   | ≥50 | 11   | 2.68 |
| 65 | Female | <50 | 9.2  | 3.68 |
| 66 | Female | <50 | 9.5  | 1.12 |
| 67 | Male   | <50 | 15.8 | 1.92 |
| 68 | Female | <50 | 16.6 | 2.76 |

|    |        |     |      |      |
|----|--------|-----|------|------|
| 69 | Male   | <50 | 8.9  | 2.19 |
| 70 | Female | <50 | 7.7  | 4.42 |
| 71 | Female | <50 | 17.8 | 1.07 |
| 72 | Female | <50 | 16.6 | 4.73 |
| 73 | Female | <50 | 13.8 | 2.6  |
| 74 | Male   | ≥50 | 17.3 | 1.92 |
| 75 | Female | ≥50 | 7    | 7.54 |
| 76 | Male   | ≥50 | 6.2  | 3.41 |
| 77 | Female | <50 | 10.3 | 2.92 |
| 78 | Female | <50 | 8    | 4.50 |
| 79 | Male   | <50 | 14.7 | 2.16 |
| 80 | Female | <50 | 8.9  | 1.98 |
| 81 | Male   | <50 | 6    | 1.05 |
| 82 | Female | <50 | 9.6  | 2.10 |

**Supplementary Table 2. Original information of liver cirrhosis (LC) patients**

| <b>NO.</b> | <b>Gender</b> | <b>Age (years)</b> | <b>CD147+sEVs (%)</b> | <b>AFP (ng/ml)</b> |
|------------|---------------|--------------------|-----------------------|--------------------|
| 1          | Male          | <50                | 14.8                  | 1.25               |
| 2          | Male          | ≥50                | 3.7                   | 31.9               |
| 3          | Male          | <50                | 14.7                  | 2.23               |
| 4          | Female        | ≥50                | 3.8                   | 2.63               |
| 5          | Female        | ≥50                | 4.5                   | 7.33               |
| 6          | Male          | <50                | 13.0                  | 3.64               |
| 7          | Male          | <50                | 9.7                   | 5.33               |
| 8          | Male          | ≥50                | 13.3                  | 4.07               |
| 9          | Male          | <50                | 9.8                   | 3.7                |
| 10         | Female        | <50                | 12.7                  | 1.56               |
| 11         | Male          | ≥50                | 10.9                  | 3.13               |
| 12         | Male          | <50                | 6.9                   | 1.8                |

|    |        |           |      |       |
|----|--------|-----------|------|-------|
| 13 | Male   | $\geq 50$ | 9.1  | 4.57  |
| 14 | Male   | $\geq 50$ | 9.4  | 4.48  |
| 15 | Male   | $< 50$    | 15.7 | 2.62  |
| 16 | Female | $\geq 50$ | 10   | 14.9  |
| 17 | Female | $< 50$    | 14.9 | 2.2   |
| 18 | Male   | $\geq 50$ | 12.2 | 1.81  |
| 19 | Female | $\geq 50$ | 17.8 | 1.59  |
| 20 | Male   | $< 50$    | 16.8 | 2.24  |
| 21 | Female | $\geq 50$ | 13.1 | 3.31  |
| 22 | Male   | $< 50$    | 10.8 | 2.2   |
| 23 | Male   | $< 50$    | 8.9  | 3.02  |
| 24 | Female | $\geq 50$ | 5.8  | 3.24  |
| 25 | Female | $< 50$    | 12.4 | 2.75  |
| 26 | Male   | $\geq 50$ | 6.1  | 2.85  |
| 27 | Female | $\geq 50$ | 7.8  | 6.26  |
| 28 | Male   | $< 50$    | 10.8 | 1.72  |
| 29 | Female | $< 50$    | 9.7  | 0.98  |
| 30 | Female | $\geq 50$ | 8.2  | 3.58  |
| 31 | Female | $\geq 50$ | 4.7  | 3.56  |
| 32 | Male   | $\geq 50$ | 10.6 | 2.03  |
| 33 | Male   | $\geq 50$ | 9.6  | 2.6   |
| 34 | Male   | $< 50$    | 12.6 | 11.5  |
| 35 | Female | $\geq 50$ | 17.3 | 2.65  |
| 36 | Female | $\geq 50$ | 10.5 | 2.84  |
| 37 | Male   | $\geq 50$ | 9    | 1.64  |
| 38 | Female | $< 50$    | 11.8 | 3.24  |
| 39 | Female | $\geq 50$ | 11   | 2.75  |
| 40 | Male   | $< 50$    | 15.7 | 10.60 |
| 41 | Female | $\geq 50$ | 14.4 | 2.29  |



|    |        |           |      |      |
|----|--------|-----------|------|------|
| 42 | Male   | $\geq 50$ | 15.2 | 4.58 |
| 43 | Male   | $< 50$    | 14.2 | 4.79 |
| 44 | Male   | $< 50$    | 10.9 | 3.61 |
| 45 | Male   | $\geq 50$ | 12.8 | 7.59 |
| 46 | Male   | $\geq 50$ | 13   | 1.51 |
| 47 | Male   | $\geq 50$ | 16.1 | 1.53 |
| 48 | Male   | $< 50$    | 11.3 | 1.39 |
| 49 | Female | $\geq 50$ | 10.4 | 4.38 |
| 50 | Male   | $< 50$    | 14.4 | 14.5 |
| 51 | Male   | $< 50$    | 17.4 | 3.81 |
| 52 | Male   | $< 50$    | 12.2 | 2.92 |
| 53 | Male   | $< 50$    | 14.4 | 3.58 |
| 54 | Female | $\geq 50$ | 2.9  | 1.86 |
| 55 | Male   | $< 50$    | 10.3 | 1.96 |
| 56 | Female | $\geq 50$ | 8.8  | 2.61 |
| 57 | Female | $< 50$    | 10.9 | 1.32 |
| 58 | Female | $\geq 50$ | 12.8 | 2.44 |
| 59 | Male   | $\geq 50$ | 3.9  | 3.76 |

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**Supplementary Table 3. Original information of hepatocellular carcinoma (HCC) patients**

| No | Age (Years) | Gender | HBV infection | Liver Cirrhosis | Tumor size | Tumor number | Portal vein tumor thrombus (PVT) | Extrahepatic Metastasis (EHM) | Barcelona Clinical Liver Cancer(BCLC) | AFP (ng/ml) | Preoperation CD147 <sup>+</sup> sEVs (%) | Postoperation CD147 <sup>+</sup> sEVs (%) |
|----|-------------|--------|---------------|-----------------|------------|--------------|----------------------------------|-------------------------------|---------------------------------------|-------------|--|---|
| 1  | ≥50         | Male   | Absent        | Present         | ≥5cm       | Single       | Present                          | Absent                        | B                                     | 80568       | 15.6                                     |   |
| 2  | ≥50         | Female | Present       | Present         | ≥5cm       | Multiple     | Absent                           | Absent                        | C                                     | 3572        | 21.9                                     |   |
| 3  | ≥50         | Male   | Absent        | Present         | ≥5cm       | Multiple     | Absent                           | Absent                        | B                                     | 1320.5      | 23.5                                     | 16.7                                      |
| 4  | ≥50         | Male   | Present       | Absent          | ≥5cm       | Single       | Absent                           | Absent                        | C                                     | 501         | 19.7                                     |   |
| 5  | <50         | Female | Present       | Absent          | <5cm       | Single       | Absent                           | Absent                        | C                                     | 6.87        | 19.7                                     |   |
| 6  | <50         | Male   | Present       | Absent          | ≥5cm       | Single       | Absent                           | Absent                        | C                                     | 10906       | 21.9                                     |   |
| 7  | ≥50         | Male   | Present       | Absent          | ≥5cm       | Single       | Absent                           | Absent                        | C                                     | 382         | 15.5                                     |   |
| 8  | ≥50         | Male   | Present       | Absent          | ≥5cm       | Multiple     | Present                          | Present                       | D                                     | 56855       | 15.1                                     |   |
| 9  | <50         | Male   | Present       | Absent          | ≥5cm       | Single       | Absent                           | Absent                        | A                                     | 48.5        | 13.2                                     | 12  |
| 10 | <50         | Male   | Absent        | Present         | ≥5cm       | Single       | Absent                           | Absent                        | C                                     | 96.9        | 12.8                                     |   |

|    |           |        |         |         |                   |          |         |         |   |        |      |      |
|----|-----------|--------|---------|---------|-------------------|----------|---------|---------|---|--------|------|------|
| 11 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | C | 382    | 15.5 |      |
| 12 | $< 50$    | Male   | Absent  | Present | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 256    | 13.6 |      |
| 13 | $< 50$    | Female | Present | Absent  | $\geq 5\text{cm}$ | Multiple | Present | Present | B | 145    | 14.9 |      |
| 14 | $< 50$    | Male   | Present | Absent  | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | C | 47.1   | 17.5 |      |
| 15 | $< 50$    | Male   | Absent  | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | A | 96.9   | 12.8 |      |
| 16 | $\geq 50$ | Male   | Absent  | Absent  | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | A | 1411   | 22.7 |      |
| 17 | $\geq 50$ | Male   | Absent  | Absent  | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 72.7   | 16.2 |      |
| 18 | $< 50$    | Male   | Absent  | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | B | 1.21   | 14.2 | 13.8 |
| 19 | $\geq 50$ | Female | Absent  | Absent  | $< 5\text{cm}$    | Single   | Absent  | Absent  | B | 2654   | 16.1 |      |
| 20 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Absent  | C | 484000 | 14.2 |      |
| 21 | $< 50$    | Male   | Absent  | Absent  | $\geq 5\text{cm}$ | Multiple | Present | Absent  | C | 1827   | 22.3 |      |
| 22 | $\geq 50$ | Male   | Absent  | Present | $< 5\text{cm}$    | Single   | Present | Present | C | 2654   | 16.6 |      |
| 23 | $\geq 50$ | Male   | Absent  | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | B | 382    | 15.5 |      |
| 24 | $\geq 50$ | Female | Present | Absent  | $\geq 5\text{cm}$ | Multiple | Present | Absent  | C | 354    | 15.6 |      |
| 25 | $\geq 50$ | Male   | Absent  | Absent  | $\geq 5\text{cm}$ | Multiple | Present | Absent  | D | 2.89   | 18.7 |      |

|    |           |        |         |         |                   |          |         |         |   |        |      |      |
|----|-----------|--------|---------|---------|-------------------|----------|---------|---------|---|--------|------|------|
| 26 | $\geq 50$ | Male   | Absent  | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | D | 1.41   | 22.7 |      |
| 27 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | D | 1124.5 | 20.2 |      |
| 28 | $< 50$    | Female | Present | Absent  | $< 5\text{cm}$    | Single   | Absent  | Absent  | A | 3.3    | 13.6 | 12.7 |
| 29 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 122    | 14.1 |      |
| 30 | $\geq 50$ | Female | Present | Absent  | $\geq 5\text{cm}$ | Multiple | Present | Absent  | B | 443    | 20.5 |      |
| 31 | $< 50$    | Male   | Present | Present | $< 5\text{cm}$    | Single   | Absent  | Present | D | 44277  | 14.2 |      |
| 32 | $< 50$    | Male   | Present | Absent  | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | B | 25598  | 14.7 | 13.6 |
| 33 | $< 50$    | Male   | Present | Absent  | $\geq 5\text{cm}$ | Single   | Present | Absent  | C | 138    | 16.2 |      |
| 34 | $\geq 50$ | Male   | Absent  | Absent  | $< 5\text{cm}$    | Single   | Absent  | Absent  | D | 1200   | 12   |      |
| 35 | $< 50$    | Male   | Absent  | Absent  | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | C | 154    | 17.5 | 14   |
| 36 | $\geq 50$ | Male   | Present | Absent  | $\geq 5\text{cm}$ | Multiple | Present | Present | A | 484000 | 12   |      |
| 37 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | C | 1860   | 14.9 |      |
| 38 | $\geq 50$ | Female | Present | Absent  | $< 5\text{cm}$    | Multiple | Absent  | Present | D | 8688   | 10.6 |      |
| 39 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | A | 267    | 18.1 | 16   |
| 40 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | A | 79.9   | 9.5  |      |

|    |     |        |         |         |      |          |         |         |   |        |      |      |
|----|-----|--------|---------|---------|------|----------|---------|---------|---|--------|------|------|
| 41 | <50 | Male   | Present | Present | ≥5cm | Multiple | Present | Absent  | C | 132597 | 18.4 |      |
| 42 | <50 | Male   | Present | Present | ≥5cm | Multiple | Absent  | Absent  | C | 2708.6 | 21.7 |      |
| 43 | <50 | Female | Present | Present | <5cm | Multiple | Absent  | Absent  | C | 79.3   | 13.9 |      |
| 44 | <50 | Male   | Absent  | Present | <5cm | Single   | Absent  | Absent  | B | 46794  | 15.7 |      |
| 45 | ≥50 | Female | Present | Present | ≥5cm | Multiple | Present | Absent  | C | 894    | 11.5 |      |
| 46 | ≥50 | Male   | Present | Present | <5cm | Multiple | Present | Absent  | C | 2.12   | 16.4 |      |
| 47 | ≥50 | Male   | Present | Present | <5cm | Multiple | Present | Absent  | A | 128    | 9.9  |      |
| 48 | <50 | Female | Present | Present | ≥5cm | Multiple | Present | Present | D | 484000 | 14.2 | 12.3 |
| 49 | ≥50 | Male   | Present | Present | ≥5cm | Multiple | Present | Present | D | 405.8  | 19.1 |      |
| 50 | ≥50 | Male   | Absent  | Absent  | ≥5cm | Multiple | Present | Present | D | 1404   | 25.4 |      |
| 51 | <50 | Male   | Present | Present | ≥5cm | Multiple | Present | Present | D | 4506   | 18.4 |      |
| 52 | <50 | Male   | Present | Absent  | <5cm | Multiple | Absent  | Absent  | B | 153674 | 14.1 |      |
| 53 | <50 | Female | Present | Present | ≥5cm | Multiple | Present | Absent  | C | 80     | 14.9 |      |
| 54 | <50 | Male   | Absent  | Absent  | <5cm | Multiple | Present | Absent  | C | 56     | 12.7 |      |
| 55 | <50 | Male   | Absent  | Present | ≥5cm | Multiple | Absent  | Absent  | B | 26     | 20.6 |      |

|    |           |        |         |         |                   |          |         |         |   |        |      |      |
|----|-----------|--------|---------|---------|-------------------|----------|---------|---------|---|--------|------|------|
| 56 | $\geq 50$ | Male   | Absent  | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | B | 1666   | 17.2 | 14.8 |
| 57 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 3987   | 20.4 |      |
| 58 | $\geq 50$ | Female | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | A | 18.1   | 8.6  |      |
| 59 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 1118   | 21.7 |      |
| 60 | $< 50$    | Male   | Present | Present | $< 5\text{cm}$    | Single   | Absent  | Absent  | B | 699    | 11.9 |      |
| 61 | $\geq 50$ | Female | Present | Absent  | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 14320  | 21.9 | 17.2 |
| 62 | $\geq 50$ | Male   | Present | Absent  | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | B | 205616 | 16.4 |      |
| 63 | $\geq 50$ | Female | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 59.1   | 15.7 |      |
| 64 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Single   | Present | Absent  | C | 29.8   | 17.4 |      |
| 65 | $< 50$    | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | C | 5095   | 14.4 |      |
| 66 | $\geq 50$ | Female | Present | Present | $\geq 5\text{cm}$ | Single   | Present | Absent  | C | 9900   | 18.6 |      |
| 67 | $< 50$    | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Present | Present | D | 4506   | 18.4 |      |
| 68 | $< 50$    | Male   | Present | Absent  | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | B | 62971  | 14.1 |      |
| 69 | $\geq 50$ | Male   | Present | Absent  | $< 5\text{cm}$    | Single   | Absent  | Absent  | A | 3.6    | 6.8  |      |
| 70 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | C | 39.4   | 12.6 |      |

|    |     |        |         |         |      |          |         |         |   |        |      |      |
|----|-----|--------|---------|---------|------|----------|---------|---------|---|--------|------|------|
| 71 | <50 | Female | Present | Present | ≥5cm | Multiple | Present | Present | D | 217132 | 13.3 |      |
| 72 | <50 | Male   | Present | Present | ≥5cm | Multiple | Absent  | Absent  | A | 8613   | 11.5 |      |
| 73 | ≥50 | Male   | Present | Present | ≥5cm | Single   | Present | Absent  | C | 23.1   | 18.5 | 14.3 |
| 74 | ≥50 | Female | Absent  | Absent  | <5cm | Single   | Absent  | Absent  | A | 2.25   | 11.2 |      |
| 75 | ≥50 | Female | Present | Present | ≥5cm | Multiple | Present | Absent  | B | 35.9   | 12.8 |      |
| 76 | ≥50 | Male   | Absent  | Present | ≥5cm | Multiple | Absent  | Absent  | A | 10.2   | 11.3 |      |
| 77 | <50 | Male   | Present | Present | ≥5cm | Single   | Present | Absent  | C | 436    | 14.4 |      |
| 78 | ≥50 | Male   | Present | Present | ≥5cm | Multiple | Present | Absent  | C | 195    | 18.4 | 12.9 |
| 79 | ≥50 | Male   | Present | Present | <5cm | Single   | Absent  | Absent  | C | 318    | 13.1 |      |
| 80 | <50 | Female | Present | Present | ≥5cm | Single   | Absent  | Absent  | C | 4.7    | 12.8 |      |
| 81 | <50 | Male   | Present | Present | ≥5cm | Single   | Absent  | Absent  | C | 96.9   | 10.5 |      |
| 82 | ≥50 | Male   | Present | Present | <5cm | Single   | Absent  | Absent  | A | 4.02   | 12.9 |      |
| 83 | <50 | Female | Present | Present | <5cm | Single   | Absent  | Absent  | A | 2232   | 8.6  |      |
| 84 | <50 | Male   | Absent  | Present | <5cm | Multiple | Absent  | Absent  | B | 1.09   | 11.1 |      |
| 85 | ≥50 | Female | Absent  | Absent  | ≥5cm | Single   | Absent  | Present | D | 45.4   | 15.6 |      |

|     |     |        |         |         |      |          |         |         |   |        |      |      |
|-----|-----|--------|---------|---------|------|----------|---------|---------|---|--------|------|------|
| 86  | <50 | Male   | Present | Present | ≥5cm | Single   | Present | Absent  | C | 5      | 19.7 |      |
| 87  | <50 | Female | Present | Present | ≥5cm | Single   | Absent  | Absent  | C | 93.8   | 14.7 |      |
| 88  | <50 | Male   | Present | Present | ≥5cm | Multiple | Present | Absent  | C | 42     | 13.7 |      |
| 89  | ≥50 | Male   | Present | Present | ≥5cm | Single   | Absent  | Absent  | A | 656    | 20.2 | 15   |
| 90  | ≥50 | Male   | Present | Present | <5cm | Multiple | Absent  | Absent  | A | 21765  | 10.6 |      |
| 91  | ≥50 | Male   | Present | Present | <5cm | Multiple | Present | Present | D | 533    | 21.3 |      |
| 92  | <50 | Female | Present | Present | <5cm | Single   | Present | Present | D | 1.9    | 19.8 |      |
| 93  | <50 | Male   | Present | Present | ≥5cm | Single   | Absent  | Present | C | 103652 | 18.4 |      |
| 94  | ≥50 | Male   | Present | Present | <5cm | Single   | Absent  | Absent  | A | 5395   | 13.7 |      |
| 95  | <50 | Male   | Present | Present | ≥5cm | Single   | Present | Absent  | C | 672    | 25.8 |      |
| 96  | ≥50 | Female | Present | Present | <5cm | Single   | Absent  | Absent  | A | 1078   | 20.2 |      |
| 97  | ≥50 | Male   | Present | Present | ≥5cm | Single   | Absent  | Absent  | A | 318    | 4.9  |      |
| 98  | ≥50 | Male   | Present | Present | ≥5cm | Multiple | Present | Absent  | C | 372    | 15.5 |      |
| 99  | ≥50 | Female | Present | Absent  | ≥5cm | Multiple | Absent  | Absent  | B | 4.41   | 13   |      |
| 100 | ≥50 | Male   | Present | Present | ≥5cm | Single   | Absent  | Present | D | 1960   | 22.9 | 14.6 |



|     |           |        |         |         |                   |          |         |         |   |       |      |      |
|-----|-----------|--------|---------|---------|-------------------|----------|---------|---------|---|-------|------|------|
| 101 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 92.7  | 20.5 |      |
| 102 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | A | 142   | 11.1 |      |
| 103 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | B | 15.2  | 12.1 |      |
| 104 | $< 50$    | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | A | 2.44  | 11.3 |      |
| 105 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Present | D | 1200  | 19.4 | 17.1 |
| 106 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Single   | Absent  | Absent  | C | 93.5  | 17.6 |      |
| 107 | $\geq 50$ | Female | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | A | 5395  | 13.7 |      |
| 108 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Single   | Absent  | Absent  | C | 286   | 13.1 |      |
| 109 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 678.4 | 20.5 |      |
| 110 | $\geq 50$ | Female | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | A | 2.35  | 10.3 |      |
| 111 | $< 50$    | Female | Present | Present | $< 5\text{cm}$    | Single   | Present | Absent  | C | 65.3  | 8.1  |      |
| 112 | $\geq 50$ | Female | Absent  | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | C | 1210  | 15.4 | 14.3 |
| 113 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | A | 142   | 11.1 |      |
| 114 | $\geq 50$ | Female | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 3862  | 20.5 |      |
| 115 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Absent  | B | 372   | 13.2 |      |

|     |           |        |         |         |                   |          |         |         |   |        |      |      |
|-----|-----------|--------|---------|---------|-------------------|----------|---------|---------|---|--------|------|------|
| 116 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Present | D | 1210   | 17.6 |      |
| 117 | $\geq 50$ | Female | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 552    | 21.4 |      |
| 118 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | B | 774    | 14.9 |      |
| 119 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Present | C | 1.38   | 13.6 |      |
| 120 | $\geq 50$ | Female | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | B | 23.6   | 12.5 |      |
| 121 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Single   | Absent  | Absent  | B | 142    | 13.1 |      |
| 122 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Absent  | C | 1641   | 17.1 |      |
| 123 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Absent  | C | 379690 | 18.1 | 16.8 |
| 124 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 516    | 17.7 |      |
| 125 | $\geq 50$ | Female | Present | Present | $< 5\text{cm}$    | Single   | Present | Present | D | 8.41   | 23.7 |      |
| 126 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 43.8   | 12   |      |
| 127 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 4350.6 | 21.4 |      |
| 128 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 484000 | 21.4 | 17.8 |
| 129 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Present | D | 32054  | 25   |      |
| 130 | $\geq 50$ | Female | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Present | D | 8.72   | 17   |      |

|     |           |        |         |         |                   |          |         |         |   |        |      |      |
|-----|-----------|--------|---------|---------|-------------------|----------|---------|---------|---|--------|------|------|
| 131 | $\geq 50$ | Female | Absent  | Present | $< 5\text{cm}$    | Single   | Present | Present | D | 1.45   | 27.3 |      |
| 132 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Single   | Absent  | Absent  | A | 858    | 7.9  |      |
| 133 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Absent  | C | 4509   | 15   | 14.6 |
| 134 | $\geq 50$ | Male   | Present | Absent  | $< 5\text{cm}$    | Single   | Absent  | Present | B | 1386   | 13.6 |      |
| 135 | $< 50$    | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Absent  | C | 2.79   | 12.7 |      |
| 136 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Single   | Absent  | Absent  | A | 10.4   | 18   |      |
| 137 | $< 50$    | Female | Present | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | C | 34241  | 15.8 |      |
| 138 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Present | D | 2341.5 | 21.3 |      |
| 139 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Present | Absent  | B | 528    | 14.4 |      |
| 140 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Absent  | B | 3.9    | 17.8 |      |
| 141 | $\geq 50$ | Male   | Present | Absent  | $\geq 5\text{cm}$ | Multiple | Present | Present | D | 38231  | 16.9 |      |
| 142 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | B | 884    | 15.5 |      |
| 143 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Present | Present | C | 22.3   | 18.7 |      |
| 144 | $\geq 50$ | Male   | Present | Present | $< 5\text{cm}$    | Multiple | Absent  | Present | D | 734    | 21.3 |      |
| 145 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | B | 1343   | 15.9 |      |

|     |           |        |         |         |                   |          |         |         |   |       |      |
|-----|-----------|--------|---------|---------|-------------------|----------|---------|---------|---|-------|------|
| 146 | <50       | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | A | 12    | 10.8 |
| 147 | <50       | Female | Present | Present | <5cm              | Multiple | Present | Present | B | 72394 | 22.1 |
| 148 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 11744 | 23.5 |
| 149 | $\geq 50$ | Male   | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | B | 32.1  | 10.3 |
| 150 | $\geq 50$ | Female | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | A | 1.89  | 9    |
| 151 | $\geq 50$ | Male   | Present | Present | <5cm              | Multiple | Absent  | Absent  | A | 466.9 | 7.5  |
| 152 | $\geq 50$ | Female | Present | Present | $\geq 5\text{cm}$ | Multiple | Absent  | Absent  | C | 667   | 13.6 |
| 153 | $\geq 50$ | Male   | Absent  | Absent  | <5cm              | Single   | Absent  | Absent  | A | 2.56  | 11.4 |
| 154 | <50       | Male   | Present | Present | <5cm              | Multiple | Absent  | Absent  | A | 9.22  | 12.4 |
| 155 | <50       | Male   | Present | Present | $\geq 5\text{cm}$ | Single   | Absent  | Absent  | B | 582   | 17.3 |

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