

Supplemental Tables

Supplemental Table S1. Experimental layout for assessing the regenerative potential of neonatal pig hearts.

| | | |
|------------------------------|------------------|------------------|
| Total N=36 | | |
| Age Group | 0 Day Old Piglet | 7 Day Old Piglet |
| Apex Removal Surgery | N=13 | N=15 |
| Sham Surgery (Control) | N=4 | N=4 |
| | | |
| Heart Harvest for Assessment | | |
| | N=4 (5 Days PO) | N=5 (5 Days PO) |
| Apex Removal Surgery | N=4 (1 Week PO) | N=5 (1 Week PO) |
| | N=5 (4 Weeks PO) | N=5 (4 Weeks PO) |
| Sham Surgery | N=2 (1 Week PO) | N=2 (1 Week PO) |
| | N=2 (4 Weeks PO) | N=2 (4 Weeks PO) |

Supplemental Table S2: Surgery information for each piglet. Table summarizes sex, body weight, resected tissue mass, and age of the piglets.

| Piglet ID | Sex of Piglet | Body Weight at Surgery (lbs) | Tissue Mass Removed from Apical Region (mg) | Age at Time of Apical Resection |
|------------------|---------------|------------------------------|-------------------------------------------------------------|---------------------------------|
| 2033 | M | 3.31 | 0 day control | NA |
| 2038 | F | 2.81 | 0 day control | NA |
| 005 | F | 3.53 | 0 day control | NA |
| 017 | M | 2.20 | 0 day control | NA |
| 2034 | M | 4.31 | *, sample lost in pig (cut similar to 2035) | 0 days |
| 2035 | F | 3.31 | 5.1 | 0 days |
| 2036 | M | 3.69 | 22.6 | 0 days |
| 2039 | M | 3.79 | 34.5 (accidently killed by the mother sow 3 days PO) | 0 days |
| 2037 | F | 3.56 | *, sample lost in pig (cut similar to 2039) | 0 days |
| 004 | M | 3.09 | 2.3 | 0 days |
| 013 | F | 3.00 | 2.2 | 0 days |
| 014 | M | 4.37 | 16.8 | 0 days |
| 015 | F | 4.10 | 3.1 | 0 days |
| 001 | F | 3.60 | 2.9 | 0 days |
| 002 | F | 3.75 | 2.6 | 0 days |
| 018 | F | 3.53 | 0.8 | 0 days |
| 024 | M | 3.09 | 0.3 | 0 days |
| AVG ± STD | | 3.64 ± 0.48 | 8.47 ± 11.20 | |
| | | | | |
| 2071 | F | 6.31 | 7 day control | NA |
| 2077 | M | 3.42 | 7 day control | NA |
| 012 | F | 5.51 | 7 day control | NA |
| 027 | M | 6.59 | 7 day control | NA |
| 2073 | M | 3.09 | 13.0 | 7 days |
| 2075 | M | 4.41 | 6.0 | 7 days |
| 2076 | M | 7.48 | 8.4 | 7 days |
| 2078* | M | 4.86 | *, heart tore during surgery; euthanized-massive blood loss | 7 days |
| 2079* | F | 5.29 | *, resected into ventricle; euthanized-massive blood loss | 7 days |
| 007 | F | 5.07 | 6.7 | 7 days |
| 008 | M | 5.07 | 5.2 | 7 days |
| 029 | F | 7.74 | 12.2 | 7 days |
| 031 | M | 7.61 | 2.3 | 7 days |
| 009 | M | 5.07 | 9.9 | 7 days |
| 010 | F | 6.17 | 7.3 | 7 days |
| 011 | M | 5.07 | 2.4 | 7 days |
| 016 | F | 6.72 | 11.5 | 7 days |
| 026 | M | 7.34 | 6.5 | 7 days |
| 028 | M | 8.07 | 9.0 | 7 days |
| AVG ± STD | | 6.39 ± 1.19 | 5.62 ± 1.75 | |

Supplemental Table S3: Body weight, weight of the heart, and age of piglets at euthanasia.

| Piglet ID and Group | Body Weight at Euthanasia (lbs) | Heart Mass at Euthanasia (g) | Age at Euthanasia |
|-----------------------|---------------------------------|------------------------------|---------------------|
| 2033 (0 day control) | 13.28 | 35.73 | 4 weeks |
| 2038 (0 day control) | 13.88 | 56.70 | 4 weeks |
| AVG ± STD | 13.58 ± 0.30 | 46.22 ± 10.49 | ----- |
| 2034 (0 day surgery) | 14.52 | 42.52 | 4 weeks |
| 2035 (0 day surgery) | 15.40 | 39.69 | 4 weeks |
| 2036 (0 day surgery) | 15.66 | 42.52 | 4 weeks |
| 2037 (0 day surgery) | 16.24 | 48.19 | 4 weeks |
| AVG ± STD | 15.46 ± 0.62 | 43.23 ± 3.09 | ----- |
| 2039* (0 day surgery) | ----- | ----- | Lost at 3 days |
| | | | |
| 2071 (7 day control) | 16.78 | 51.03 | 5 weeks |
| 2077 (7 day control) | 16.82 | 48.19 | 5 weeks |
| AVG ± STD | 16.80 ± 0.02 | 49.61 ± 1.42 | ----- |
| 2073 (7 day surgery) | 9.48 | 25.51 | 5 weeks |
| 2075 (7 day surgery) | 11.16 | 31.18 | 5 weeks |
| 2076 (7 day surgery) | 21.52 | 56.70 | 5 weeks |
| AVG ± STD | 14.05 ± 5.32 | 37.80 ± 13.57 | ----- |
| 2078* (7 day surgery) | ----- | ----- | Lost during surgery |
| 2079* (7 day surgery) | ----- | ----- | Lost during surgery |
| | | | |
| 005 (0 day control) | 5.82 | 26.48 | 1 week |
| 017 (0 day control) | 4.08 | 18.92 | 1 week |
| AVG ± STD | 4.95 ± 0.87 | 22.70 ± 3.78 | ----- |
| 004 (0 day surgery) | 4.02 | 14.83 | 5 days |
| 013 (0 day surgery) | 4.23 | 17.67 | 5 days |
| 014 (0 day surgery) | 6.48 | 26.73 | 5 days |
| 015 (0 day surgery) | 5.86 | 28.00 | 5 days |
| AVG ± STD | 5.15 ± 1.05 | 21.81 ± 5.67 | ----- |
| 001 (0 day surgery) | 5.46 | 20.01 | 1 week |
| 002 (0 day surgery) | 5.30 | 22.82 | 1 week |
| 018 (0 day surgery) | 5.86 | 34.91 | 1 week |
| 024 (0 day surgery) | 5.20 | 28.57 | 1 week |
| AVG ± STD | 5.46 ± 0.25 | 26.57 ± 5.72 | ----- |
| | | | |
| 012 (7 day control) | 10.10 | 31.16 | 1 week |
| 027 (7 day control) | 9.88 | 31.52 | 1 week |
| AVG ± STD | 9.99 ± 0.11 | 31.34 ± 0.18 | ----- |
| 007 (7 day surgery) | 7.64 | 24.71 | 5 days |
| 008 (7 day surgery) | 6.92 | 22.22 | 5 days |
| 011 (7 day surgery) | 9.06 | 39.72 | 5 days |
| 029 (7 day surgery) | 7.74 | 34.27 | 5 days |
| 031 (7 day surgery) | 7.61 | 34.14 | 5 days |
| AVG ± STD | 7.79 ± 0.70 | 31.01 ± 6.53 | ----- |
| 009 (7 day surgery) | 8.30 | 34.54 | 1 week |
| 010 (7 day surgery) | 10.34 | 34.36 | 1 week |
| 016 (7 day surgery) | 6.72 | 37.80 | 1 week |
| 026 (7 day surgery) | 7.34 | 42.16 | 1 week |
| 028 (7 day surgery) | 8.07 | 44.11 | 1 week |
| AVG ± STD | 8.15 ± 1.23 | 38.59 ± 3.95 | ----- |