

Supplementary Table 1. Surface characteristics of mid and late stages of bovine fetal ovaries.

Sample No.	Gestational age (days)	Length (mm)* of ovarian surface epithelium	Length (mm)* of single layered cuboidal cells (%)[†]	Length (mm)* of multilayered cuboidal cells (%)[†]	Length (mm)* of squamous cells (%)[†]
1	101	2.85	2.25 (78.9%)	0.52 (18.2%)	0.07 (2.5%)
2	107	3.48	2.76 (79.3%)	0.54 (15.5%)	0.17 (5.9%)
3	144	5.34	4.08 (76.4%)	1.01 (18.9%)	0.25 (4.7%)
4	160	4.86	3.86 (79.4%)	0.29 (6.0%)	0.71 (14.6%)
5	180	5.07	3.89 (76.7%)	0.40 (7.9%)	0.78 (15.3%)
6	205	4.22	3.58 (84.8%)	0.40 (9.5%)	0.24 (5.7%)
7	214	3.81	3.26 (85.6%)	0.46 (12.1%)	0.09 (2.4%)
8	243	7.72	6.57 (85.1%)	0.67 (8.7%)	0.48 (6.2%)

* Length (mm) is the perimenter of the surface of the ovary measured on a histological cross section of the ovary.

[†] The percentage of the surface area covered this cell type, calculated using the length of surface covered by this cell type divided by the total length of the perimeter.

Supplementary Figure 1. Fluorescence micrographs of laminin 111 expression throughout ovarian development (laminin 111 in red). (A) The fetal ovary (top left) developed on the ventral surface of the mesonephros (m; bottom right). A clear sub-epithelial basal lamina containing laminin 111 (arrows) is visible on the mesonephric surface and the hilum region (h) of the developing ovary. The remaining fetal ovary is not covered by sub-epithelial basal lamina but fibres of laminin 111 are visible where the stroma is penetrating the ovary. (B) During mid- and (C) late stages a continuous sub-epithelial basal lamina (arrows) is formed on the ovarian surface. Nuclei were counterstained with DAPI (blue). (A) 53 days, (B) 138 days and (C) 214 days of gestation. Scale bars: (A) 100 μ m, (B) and (C) 50 μ m.

