

**Supplementary Table S1** The Modified Johnsen's scoring system.

Johnsen score	Characteristics
<b>1</b>	No recognizable seminiferous epithelium (sclerosis)
<b>2</b>	Sertoli cell only (SCO), absence of germ cells
<b>3</b>	Only the presence of spermatogonia alongside Sertoli cells, but no spermatocytes
<b>4</b>	Presence of 1–10 spermatocytes, but no spermatids
<b>5</b>	Presence of $\geq 10$ spermatocytes, but no spermatids
<b>6</b>	Presence of 1–10 round spermatids, but no elongated spermatids
<b>7</b>	Presence $\geq 10$ round spermatids, but no elongated spermatids
<b>8</b>	Presence of 1–10 elongated spermatids
<b>9</b>	Presence of $\geq 10$ elongated spermatids, but a disorganized epithelium with released immature and apoptotic cells in the lumen
<b>10</b>	Presence of $\geq 10$ elongated spermatids without immature and apoptotic cells in lumen