**Inventory of Supplements  
  
Figure S1:** Bar chart showing the mean log2 expression ratio in X*E*O*Sry* versus X*E,Z2*O*Sry* for all genes, spermatogonia-specific genes and pachytene-specific genes.

**Figure S2:** Supplementaryhistology images for X*E*O*Sry* testes at 15 dpp showing cells surviving past the stage IV checkpoint and other abnormal cells.

**Table S1:** Normalised array data and processing pipelines.  
  
**Table S2:** Cell count data from the RNA FISH experiments.

**Table S3:** Tubule counts and cell counts for analysis of apoptosis.

**Table S4:**  Cell counts for analysis of early meiotic progression and synaptonemal complex assembly

**Table S5:** Tubule counts for analysis of meiotic progression by BrdU staining.  
  
**Supplementary Methods:** Inventory of BAC probes used for RNA FISH experiments, antibodies used for immunostaining, and primers used for qPCR.