

RESEARCH

# Maternal exposure to tributyltin alters female reproductive system development

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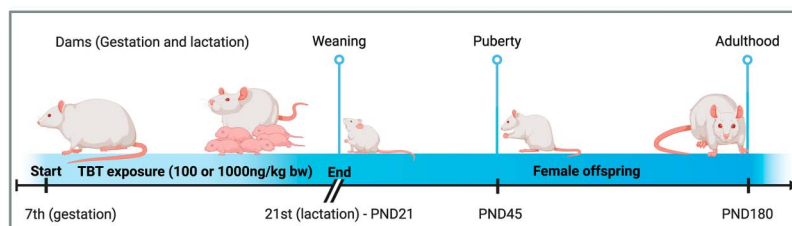
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This paper forms part of a special collection on the theme of sex effects in endocrine health and disease. The editors for this collection were Sakeneh Zraika, Flavia Bloise and Ruth Andrew.

## Graphical Abstract

### Maternal exposure to tributyltin induces ovarian dysfunction



Ovarian analysis	TBT100ng/kg bw			TBT1000ng/kg bw		
	Weaning	Puberty	Adulthood	Weaning	Puberty	Adulthood
Primordial	↑	↓	↓	—	↓	—
Primary	↑	↓	—	—	—	—
Preantral	—	↓	—	↑	↓	—
Antral	↑	—	—	—	—	—
Atretic	↑	↑	—	↑	—	—
Cystic	↑	↑	↑	—	↑	—
Corpora lutea	×	—	↓	×	—	↓
Collagen deposition	↑	↑	↑	↑	↑	↑
Mast cells	↑	↑	↑	↑	↑	↑
Protein expression	AR ↑ ERα ↑ IL-6 ↑	—	IL-6 ↑	ERα ↑	—	IL-6 ↑

Legend: AR: androgenic receptor bw: body weight ERα: estrogen receptor alpha ↑ Increased — Not significant  
IL-6: interleukin 6 PND: postnatal day ↓ Reduced × Not measured