

Appendix 2 for KER-3348

Table 4. Empirical evidence for Increased nipple/areola retention in males (AO-1786) by prenatal exposure to flutamide, procymidone, vinclozolin, finasteride, DEHP and DBP. Studies were divided into different datasets if different rat strains, exposure windows, or timepoints for observation of NR were used.

Species	Exposure window	Measurement timepoint	NOAEL (mg/kg bw/day)	LOAEL (mg/kg bw/day)	Reference
Flutamide					
Rat	GD14-18	PND13	--*	40	(You et al., 1998)
Rat	GD12-21	PND13	No	6.25	(McIntyre et al., 2001)
Rat	GD7-PND16	PND12(+/-2)	0.5	1.0	(Hass et al., 2007)
Rat	GD6-PND30	PND12	0.025	0.25	(Fussell et al., 2015)
Procymidone					
Rat	GD7-PND16	PND12	10	14.1	(Hass et al., 2007)
Rat	GD14-PND3	PND10-13	--*	100	(Wolf et al., 1999)
Vinclozolin					
Rat	GD14-49	PND13	No	200	(Wolf et al., 2000)
Rat	GD7-PND16	PND13	**	**	(Christiansen et al., 2009)
Rat	GD7-PND16	PND13	5	50	(Christiansen et al., 2009)
Rat	GD7-PND16	PND12	No	5	(Hass et al., 2007)
Rat (Wistar)	14DPC-PND3	PND12-13	3	12	(Hellwig et al., 2000)

Species	Exposure window	Measurement timepoint	NOAEL (mg/kg bw/day)	LOAEL (mg/kg bw/day)	Reference
Rat (Long Evans Hooded)	14DPC-PND3	PND12-13	6	12	(Hellwig et al., 2000)
Rat	Premating, gestation, lactation	PND12	40 ppm	200 ppm	(Matsuura et al., 2005)
Rat	Weaning F1-through lactation	PND12	40 ppm	200 ppm	(Matsuura et al., 2005)
Rat	GD14-PND3	PND13	No	3.125	(Ostby et al., 1999)
Rat	Premating, gestation, lactation	PND12-13	4	20	(Schneider et al., 2011)
Rat	GD14-19	PND14	--*	200	(Wolf et al., 2004)
Finasteride					
Rat	GD7-21+PND1-16	PND13	No	0.01	(Christiansen et al., 2009)
DEHP					
Rat	GD6-PND21	PND13	135	405	(Andrade et al., 2006)
Rat	GD7-PND17	PND13	--*	750	(Borch et al., 2004)
Rat	GD7-PND16	PND12	No	10	(Christiansen et al., 2010)
Rat	GD7-PND16	PND12	100	No	(Christiansen et al., 2010)
Rat	GD7-PND16	PND13	30	No	(Christiansen et al., 2009)

Species	Exposure window	Measurement timepoint	NOAEL (mg/kg bw/day)	LOAEL (mg/kg bw/day)	Reference
Rat	GD14-PND3	PND13	--*	750	(Gray et al., 2000)
Rat	GD8-lactation day 17	PND13	100	300	(Gray et al., 2009)
Rat	GD14-18	PND14	500	No	(Howdeshell et al., 2007)
Rat	GD7-PND17	PND13	No	300	(Jarfelt et al., 2005)
Rat	GD13-21	PND13	150	No	(Martino-Andrade et al., 2009)
Rat	GD3-PND21	PND14	375	750	(Moore et al., 2001)
Rat	GD12-21	PND12-14	--*	500	(Saillenfait et al., 2009)
Rat	GD14-PND3	PND10-13	--*	750	(Wolf et al., 1999)
DBP					
Rat	GD12-PND14	PND14	--*	7600ppm	(Clewell et al., 2013)
Rat	GD14-PND3	PND10-13	--*	500	(Wolf et al., 1999)
Rat	GD13-21	PND13	100	500	(Martino-Andrade et al., 2009)
Rat	GD14-18	PND14	500	No	(Howdeshell et al., 2007)
Rat	GD12-21	PND12-14	--*	500	(Saillenfait et al., 2008)
Rat	GD12-21	PND14	50	100	(Mylchreest et al., 2000)

Species	Exposure window	Measurement timepoint	NOAEL (mg/kg bw/day)	LOAEL (mg/kg bw/day)	Reference
Rat	GD12-21	PND13	No	100	(Barlow et al., 2004)

--*One dose only

** No report of NR per dose, but instead a g.logit function of the dose response. Effect doses: 30.2 for 3 nipples and 42.5 for 6 nipples.

PND=Postnatal day, DPC=Day Post Coitum, GD=Gestational Day.