

Supplement data

Suppl. Table 1 The effect of PTU and AP on serum tT_3 and tT_4 in ovariectomized rats

Group	n	Serum tT_3	Serum tT_4	
OVX CTL.	10	0.87±0.15	80.29±25.71	
PTU (mg/kg•bw)	0.1	10	0.66±0.11 ^a	55.09±6.64 ^a
	0.5	10	0.51±0.10 ^a	47.07±9.33 ^a
	1.0	10	0.31±0.07 ^a	42.62±14.34 ^a
	5.0	10	0.31±0.08 ^a	31.26±12.29 ^a
AP (mg/kg•bw)	50.0	10	0.69±0.14 ^a	62.11±16.78
	100.0	10	0.69±0.23 ^a	40.88±11.19 ^a
	250.0	10	0.58±0.14 ^a	33.44±15.60 ^a
	500.0	8	0.54±0.19 ^a	29.35±8.77 ^a

Note: all statistical significant difference was indicated by a: $P < 0.05$ compared with OVX control.

Suppl. Table 2 Goodness of fit test results of benchmark modeling for individual endpoints of PTU treated OVX rats (Confidence level=0.95, BMRF= 0.05)

Model name	T_3		T_4		TSH		Thyroid follicular/colloid		Thyroid organ/body weight	
	<i>P</i>	AIC	<i>P</i>	AIC	<i>P</i>	AIC	<i>P</i>	AIC	<i>P</i>	AIC
Exponential	<0.001	-67	<0.001	356	0.37 ^a	264.1	0.09	-46	0.25 ^a	94.5
Hill	0.02	-123	0.27 ^a	316	0.37 ^a	264.0	0.06	-45	0.27 ^a	94.4
Linear	0.01	-120	<0.001	335	<0.01	286	<0.001	-12	<0.001	101
Poower	0.01	-120	<0.001	335	<0.01	286	<0.001	-12	<0.001	101

“N/A” indicates there was no result gained; “a” indicates models with statistical significance: $P > 0.05$.

Suppl. Table 3. BMD and BMDL values for suitable endpoints of PTU treated OVX rats.

Endpoints	BMD (mg/kg bw)	BMDL (mg/kg bw)
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tT ₄ (Hill)	0.06	0.02
TSH (Power)	0.12	0.08
Thyroid organ/body weight	0.13	0.09

Suppl. Table 4 Goodness of fit test results of benchmark modeling for individual endpoints of AP treated OVX rats (Confidence level=0.95, BMRF= 0.05)

Model name	T ₄		TSH		Thyroid follicular/colloid	
	<i>P</i>	AIC	<i>P</i>	AIC	<i>P</i>	AIC
Exponential	<0.001	367	0.56 ^a	354.2	0.69 ^a	-22
Hill	0.67 ^a	325	0.66 ^a	354.1	0.98 ^a	-23
Linear	<0.001	340	<0.001	367	<0.001	-3
Poower	<0.001	340	<0.001	367	<0.001	-3

“N/A” indicates there was no result gained; “a” indicates models with statistical significance: $P > 0.05$.

Suppl. Table 5. BMD and BMDL values for suitable endpoints of AP treated OVX rats.

Endpoints	BMD (mg/kg bw)	BMDL (mg/kg bw)
tT ₄ (Hill)	46	28
TSH (Power)	38	16
Thyroid follicular/colloid	22	15