

# Women's Health

- A unique platform focusing on women's health
- 20+ validated preclinical models and services
- Enriched experience in novel model development and validation
- Comprehensive capability to support pharmacology studies and IND filing

Sexual Health

failure (POF)

**Ovulation Failure** Polycystic ovary syndrome (PCOS), Premature ovarian

**Uterus Disease** Endometriosis, Adenomyosis, Intrauterine adhesion (IUA)



**Growth & Development** 

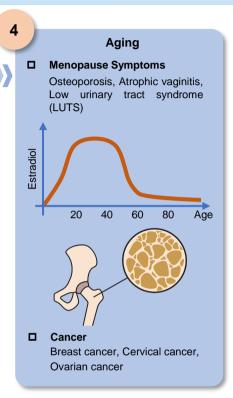
□ Precocious Puberty Endocrine disruptors, Obesity 3 Fertility & Pregnancy

**Female & Male Infertility** 

**Assisted Reproductive Technology (ART)** Controlled ovarian hyperstimulation (COH),

Ovarian hyperstimulation syndrome (OHSS)





### Women's Health

#### **Female Infertility**

- Polycystic ovary syndrome (PCOS) in mouse/rat Letrozole & High-fat diet (HFD) model, DHEA model
- Premature ovarian failure (POF) in mouse Cisplatin model
- Endometriosis in mouse

Transplantation model, Perfusion model

Adenomyosis in mouse

Tamoxifen model

Intrauterine adhesion (IUA) in rat

#### **Menopause Symptoms**

Menopause, Osteoporosis, Atrophic vaginitis (VA) Ovariectomy (OVX) model

#### Other Models

- Controlled ovarian hyperstimulation (COH) in mouse
- Hyperplasia of mammary glands (HMG) in rat

#### Other Models and Services

#### **Endocrine Diseases**

- Danazol-induced precocious puberty in mouse/rat High-fat diet (HFD) model, Danazol model
- Hypoparathyroidism in rat Total parathyroidectomy (TPTx) model

#### **Urinary Diseases**

- Interstitial cystitis/Bladder pain syndrome (IC/BPS) in rat Cyclophosphamide (CPA) model
- Benign prostatic hyperplasia (BPH) in rat Androgen model
- Alport syndrome in mouse

#### **Male Infertility**

Azoospermia in mouse Busulfan model, Hyperthermia model

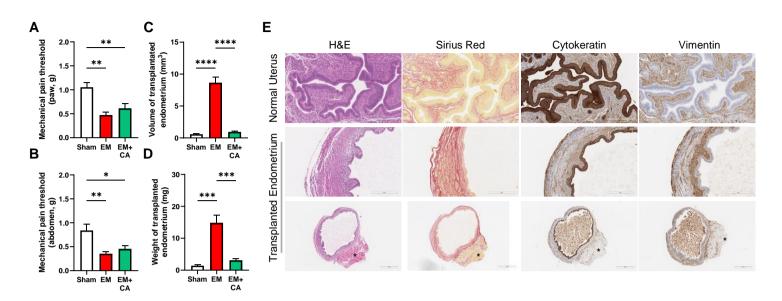
#### In-life Test

- Computer-assisted sperm analysis (CASA)
- Steelman-Pohley assay
- Follicle counting



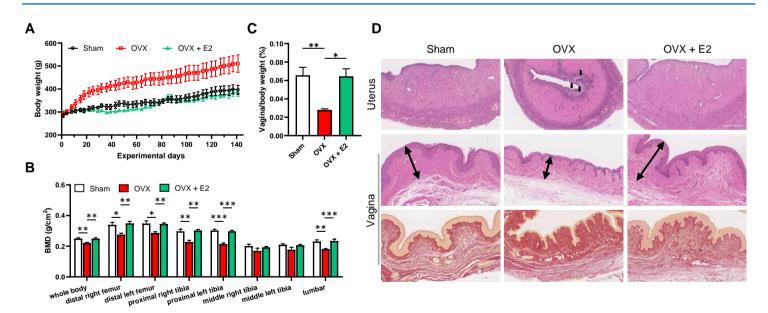


## **Endometriosis Transplantation Model in Mouse**



Evaluating the efficacy of the test compound in the endometriosis transplantation model. Endometriosis affects approximately 10% (190 million) of women and girls of reproductive age worldwide. The most common clinical condition is menstruation-related pain and ectopic growth of the endometrium. Similar symptoms appeared in our transplantation mouse model (A-E). The transplanted endometrium grew and led to a significant decrease in mechanical pain threshold (A and B). Treatment with cetrorelix acetate (CA), a GnRH inhibitor caused atrophy in the transplanted tissue and reduced pain of model animals (A-D).

## **Ovariectomy (OVX)-induced Menopause in Rat**



Evaluating the efficacy of the test compound in a rat ovariectomy-induced menopause model. Most women experience menopause between the ages of 45 and 55, which is a natural part of physiological aging. Loss of ovarian follicle function and the drop in estrogen are the main causes of menopause. Cardiovascular, urogenital, endocrine, nervous, muscle and skeletal systems are also affected. In our ovariectomy-induced menopause model, the absence of estrous cycle and weight gain were observed (A). In addition, the ovariectomized rats showed significant symptoms of postmenopausal osteoporosis (B) and atrophic vaginitis (C and D). Treatment with estradiol (E2) alleviated the menopause syndromes in ovariectomized rats (A-D).