

## Description of Additional Supplementary Files

**File name:** Supplementary Data 1

**Description:** In vitro cell culture study except Fig 1a and 1b.

**File name:** Supplementary Data 2

**Description:** In vitro cell culture study for Fig 1a and 1b.

**File name:** Supplementary Data 3

**Description:** In vitro cell culture study for mapping of RORA/CYP19A11 regulation elements.

**File name:** Supplementary Data 4

**Description:** In vivo mouse study.

**File name:** Supplementary Data 5

**Description:** In vivo human study.