**Objective**
- To correlate placental thickness and histopathological results with placental infection by ZIKV

**Methods**
- **328 Controls**: Placenta from ZIKV- patient
- **215 Exposed Placenta**: from ZIKV+ patient without congenital infection
- **76 Infected Placenta**: from ZIKV+ patient with congenital infection
  - Monthly follow-up by prenatal US
  - Anatomopathological examination

**Results**
- **Infected placentas** thicker than **exposed** or **control** placentas after 26 wg
- Placentomegaly (thickness>40 mm) more frequent in **infected placentas** (39.5%) compared to **exposed placentas** (17.2%) or **controls** (7.2%): aHR 2.02 [95%CI 1.22-3.36] and aHR 3.23 [95%CI 1.86-5.61]
- Placentomegaly more frequent in **CZS** (62.5%) or **IUFD** (45.5%) compared to asymptomatic congenital infections (30.6%): aHR 5.43 [95%CI 2.17-13.56] and aHR 4.95 [95%CI 1.65-14.83]
- Infected placentas have higher risk of any pathological anomalies (infarcts, INFD, villitis, thrombosis, calcifications, hoffbauer cells hyperplasia): aRR 2.60 [1.40-4.83]

**Conclusion**
- Placentomegaly = non-specific sign of congenital ZIKV infection
- Early placentomegaly may represent the first sign of trans-placental contamination and adverse outcomes (CZS, fetal loss)
- Infected placentas = higher risk of pathological anomalies