Objective
To describe the incidence of abdominal wall defects (omphalocele and gastroschisis) in Denmark. In addition, to assess the detection rate by ultrasound screening performed in the first and second trimester and the outcome of the affected pregnancies.

Methods
Data were retrieved from the Danish Fetal Medicine Database. Singleton pregnant women with a first trimester screening scan and a due date between 1 January 2011 - 31 December 2013 were included. Fetuses diagnosed with omphalocele or gastroschisis were identified by ICD10 codes. Information on gestational age at detection of the anomaly, prenatal or postnatal karyotype results and outcome of pregnancy (termination, miscarriage or live birth) was also retrieved from the database. All cases were validated by checking patient files.

Results
A total of 107 fetuses were diagnosed with omphalocele or gastroschisis in the national cohort of 157,068 first trimester screened women, thus the incidence of abdominal wall defects was 1: 1.468 (1: 2.533 for omphalocele and 1: 3.490 for gastroschisis). Detection rate at first trimester screening was 86.9% (93/107), and increased to 97.2% (104/107) by addition of the second trimester ultrasound scan. The three postnatally detected cases were all omphalocles. Of 62 fetuses with omphalocele 46 had chromosomal analyses and 22 had an abnormal karyotype. Termination of pregnancy was performed in 43 (69.4%) cases, 5 (8.1%) miscarried, and 14 (22.6%) resulted in a live born infant. Of the 45 fetuses with gastroschisis 24 had chromosomal analyses and one was abnormal. Seventeen (37.8%) pregnancies were terminated, 2 (4.4%) miscarried, and 26 (57.8%) were live born.

Conclusion
At a national level, the prenatal detection rate of abdominal wall defects was very high, with only one case per year not being diagnosed at first or second trimester scanning. The vast majority of fetuses with abdominal wall defects were detected early in pregnancy.