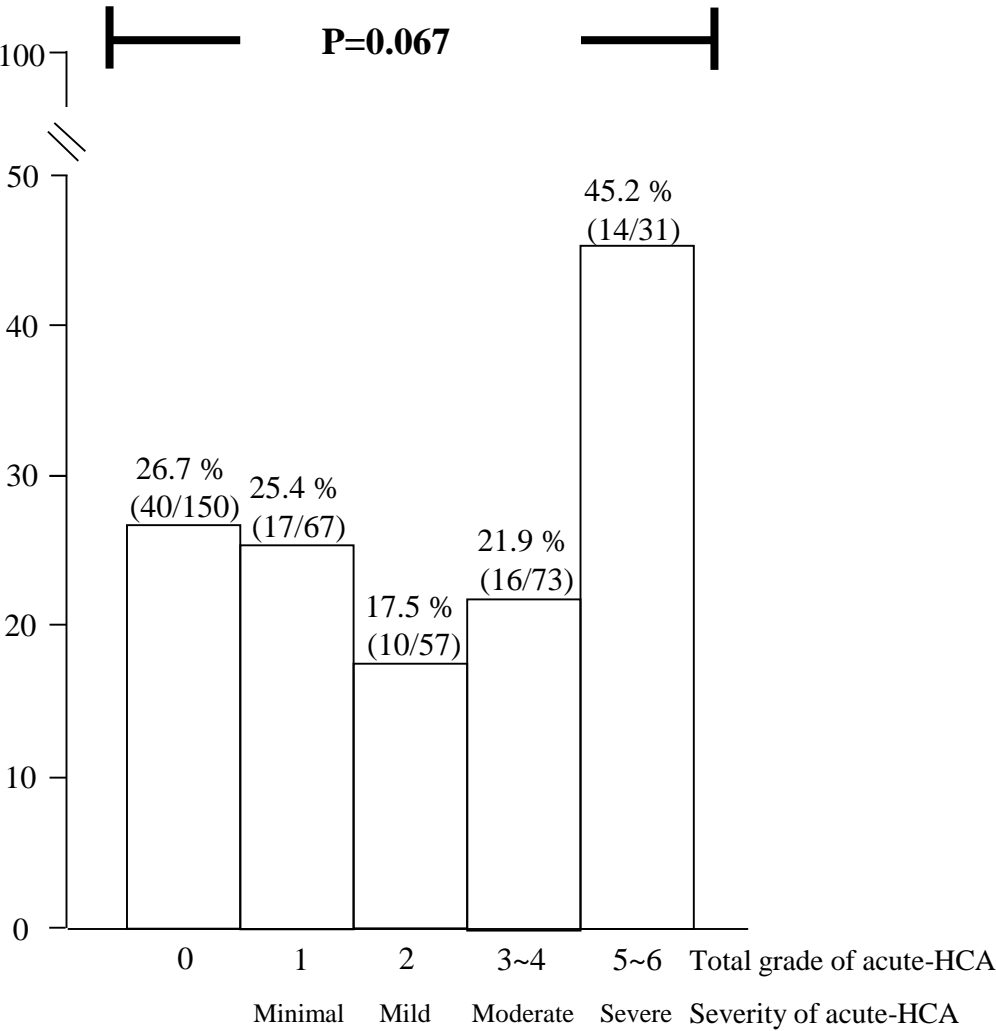


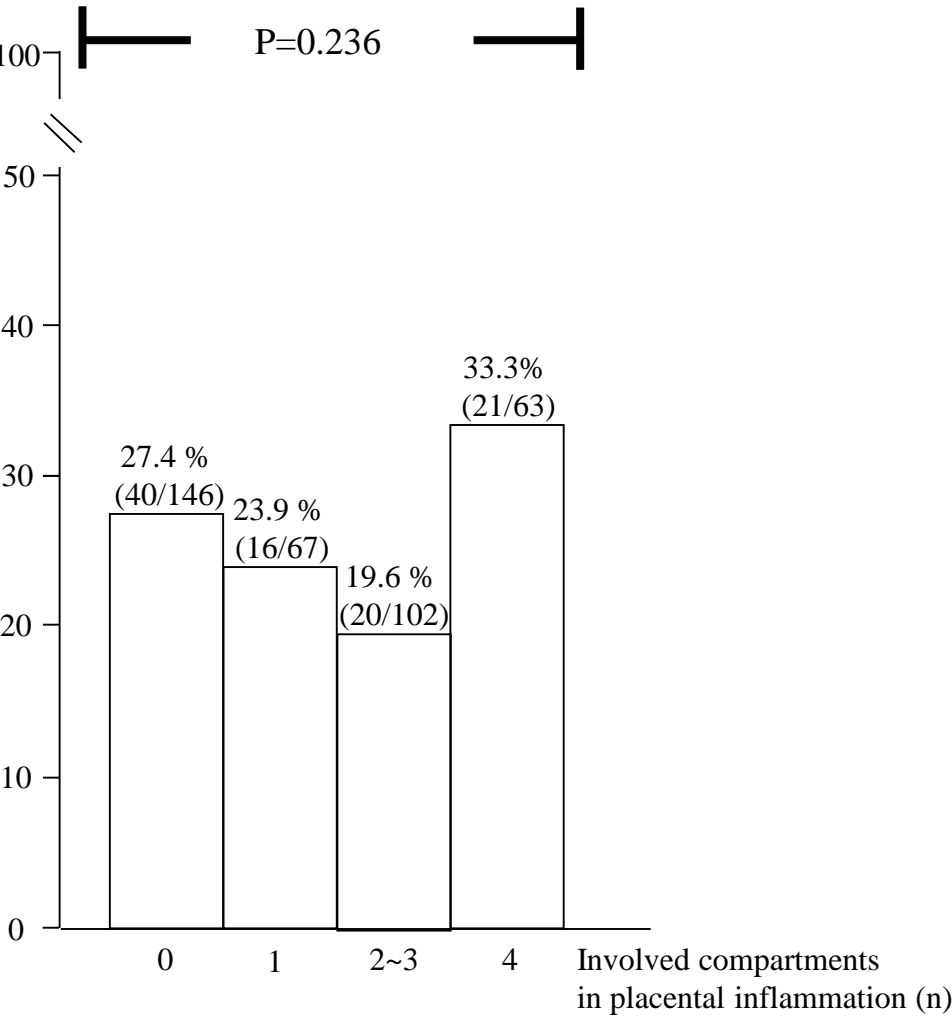
Supplementary Figure 1 (a).

The frequency of RDS or death shortly after birth (%)



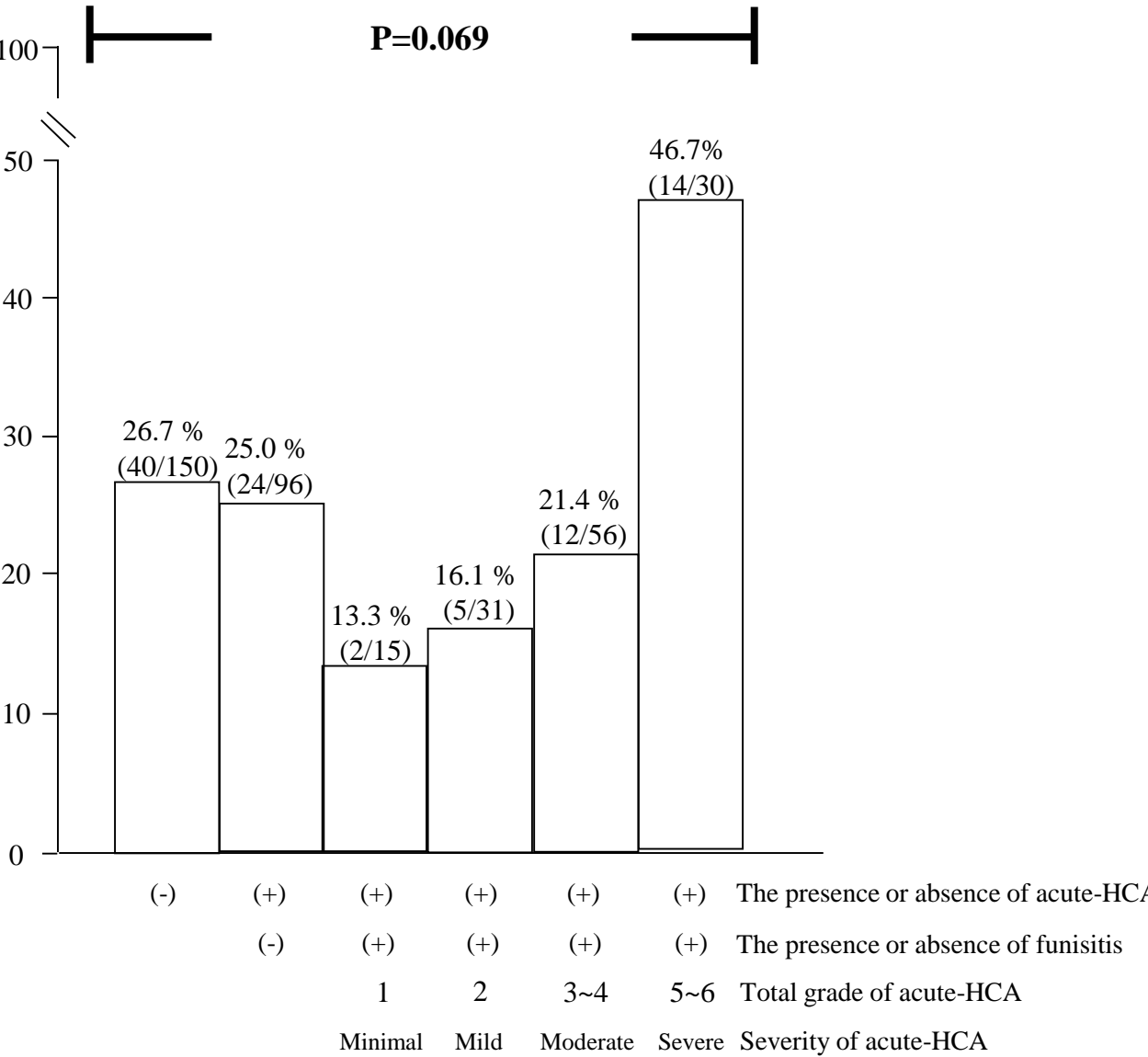
Supplementary Figure 1 (b).

The frequency of RDS or death shortly after birth (%)



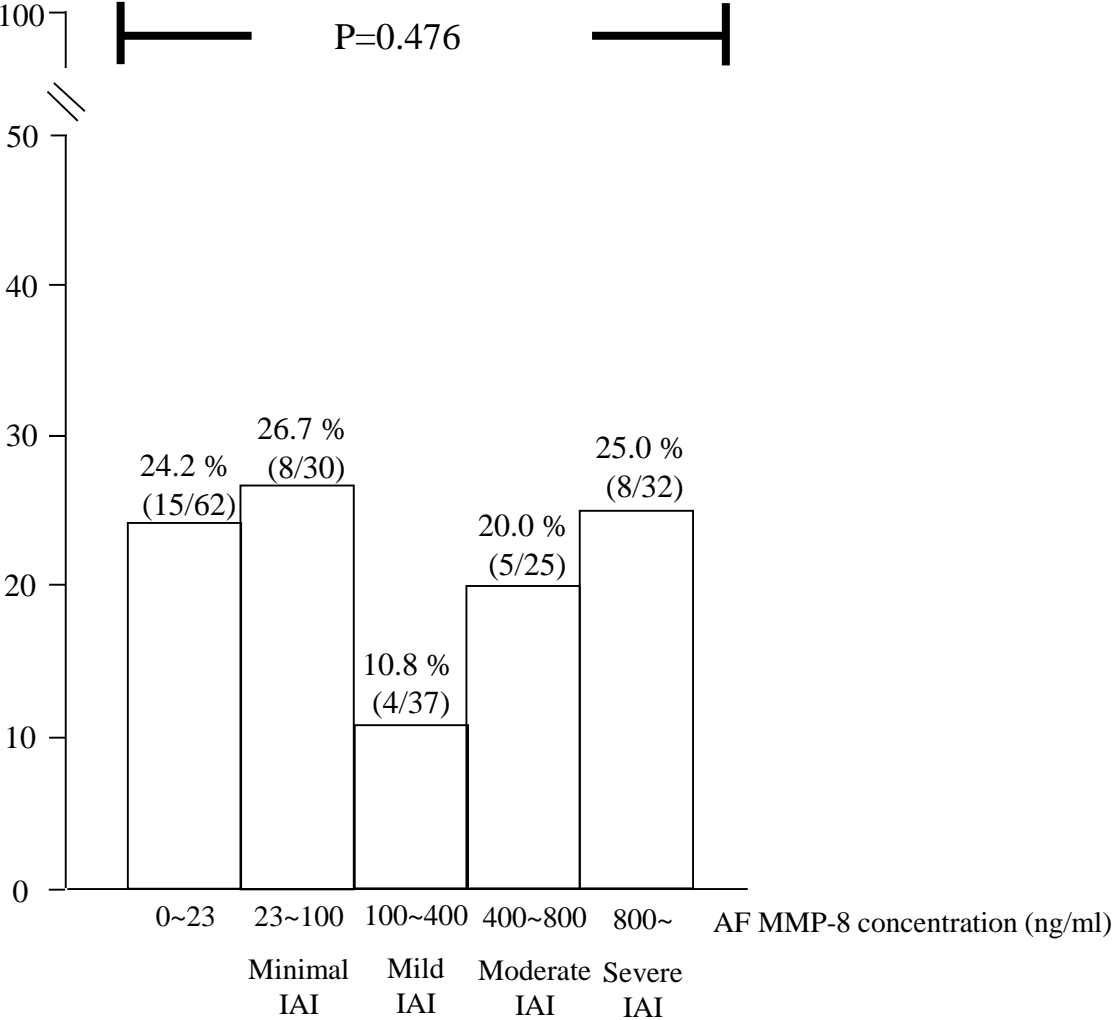
Supplementary Figure 1 (c).

The frequency of RDS or death shortly after birth (%)



Supplementary Figure 2

The frequency of RDS or death shortly after birth (%)



## Supplementary figure legends

Supplementary Figure 1. The rate of RDS or death shortly after delivery of newborn, according to (a) the presence or absence of acute-HCA and the severity (i.e., minimal, total grade 1; mild, total grade 2; moderate, total grade 3~4; and severe, total grade 5~6), (b) the number of involved compartments in placental inflammation (i.e., acute-HCA or funisitis), and (c) the presence or absence of acute-HCA and funisitis, and the severity of acute-HCA in cases with funisitis (P value means inter-group difference by chi-square test). Fisher's Exact test with Bonferroni's correction for multiple comparison test was used, and no statistical significance was found.

Supplementary Figure 2. The frequency of RDS or death shortly after delivery of newborn, according to the presence or absence of IAI and AF MMP-8 concentration (minimal inflammation,  $23 \text{ ng/ml} < \text{AF MMP-8} \leq 100 \text{ ng/ml}$ ; mild inflammation,  $100 \text{ ng/ml} < \text{AF MMP-8} \leq 400 \text{ ng/ml}$ ; moderate inflammation,  $400 \text{ ng/ml} < \text{AF MMP-8} \leq 800 \text{ ng/ml}$ ; and severe inflammation,  $800 \text{ ng/ml} < \text{AF MMP-8}$ ) among 196 preterm gestations delivered within 7 days after amniocentesis (P value means inter-group difference by chi-square test). Of 196 cases who underwent amniocentesis within 7 days of birth, AF MMP-8 concentration results were available in 186 cases, because the test

20 of AF MMP-8 concentration was not performed in 10 cases due to the limited amount  
21 of the remaining fluid. Fisher's Exact test with Bonferroni's correction for multiple  
22 comparison test was used, and no statistical significance was found.