Aim
The aim of the survey is to investigate current practice and complications of percutaneous umbilical cord blood sampling (PUBS) in Japan.

Methods
In this retrospective survey, data including perioperative information, indications, details of the procedure and procedure-related complications were collected for patients who underwent PUBS between 2012 and 2016 in Japanese perinatal care centers.

Results
One hundred and fifty-three patients underwent PUBS and a total of 223 procedures were analyzed in this study. Fetal anemia was the most common indication for PUBS, representing greater than 70% of all cases. Anemia specific to monochorionic twins, such as acute feto-fetal hemorrhage subsequent to single intrauterine fetal death (IUFD) and twin anemia-polycythemia sequence, were the leading causes of suspected fetal anemia. (Figure 1) Maternal anesthetics were given during the procedure in 70% of cases. The PTC needle (Hakko, Japan) was most commonly used in the procedure. The most frequent complication was bleeding from the umbilical cord puncture site (Table 1); however, it did not require immediate delivery during or after the procedure in any case. IUFD occurred in 11 (4.9%) procedures, 7 of which appeared to be related to the underlying fetal disease. The overall completion rate of the procedure was 97%.

Conclusion
Percutaneous umbilical cord blood sampling was most commonly performed for the evaluation of fetal anemia, usually due to complications of monochorionic twins, followed by the measurement of fetal thyroid function. The safety and the completion rate of the procedure in Japan appear satisfactory.