**Value of exome sequencing in diagnosis and management of recurrent nonimmune hydrops fetalis: A retrospective analysis**

**Running title**: Exome sequencing in recurrent NIHF and its value on management

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| **Supplementary Table 1 The phenotype and genotype information of the cohort with negative results** | | | | | | | | | | |
| Case | Number of prior pregnancies affected by NIHF | MA (years) | GA (weeks) | Fetal hydrops | Other ultrasonography abnormalities | Prenatal therapeutic management(Y/N) *†* | Pregnancy outcome***‡*** | | Fetal karyotype,CMA, infections testing and maternal MCV | Clinical exome sequencing results |
| 16 | 1 | 25 | 27+1 | Skin edema, pleural effusions, ascites | NT normal,  Polyhydramnios | Y(Intrauterine transfusion at 27+6w) | | IUFD | Negative | Negative | |
| 17 | 1 | 24 | 30+3 | Skin edema, pleural effusions | NT=2mm,  Polyhydramnios | N | | Cesarean delivery at 33+6w, newborn survival | Negative | Negative | |
| 18 | 1 | 33 | 21+5 | Skin edema, pleural effusions | NT=1.8mm, | N | | TOP at 22w | Negative | Negative | |
| 19 | 2 | 30 | 25 | Skin thickening at level of fetal skull, pleural effusions | NT normal,  Small stomach bubble, small kidney, talipes equinovarus | N | | TOP at 25+2w | Negative | Negative | |
| 20 | 1 | 28 | 21+4 | Skin edema, pleural effusions | NT=1.6mm,  Feet abnormality | N | | TOP | Negative | Negative | |
| 21 | 1 | 41 | 27+6 | Skin thickening at level of fetal skull, pleural effusions, pericardial effusion, ascites | NT normal,  Polyhydramnios | Y(Intrauterine transfusion at 28+2w and 30+1w ) | | Cesarean delivery at 32+6w, newborn survival | Negative | Negative | |
| 22 | 2 | 37 | 24+1 | Skin edema, pleural effusions | NT=1.2mm,  Tricuspid regurgitation | Y(Intrauterine transfusion twice ) | | Cesarean delivery at 34+5w, newborn survival | Negative | Negative | |
| 23 | 1 | 24 | 25 | Pleural effusions, pericardial effusion | NT=1.6mm, | Y(Intrauterine transfusion three times) | | Cesarean delivery at 37+3w, newborn survival | Negative | Negative | |
| 24 | 1 | 31 | 17+6 | Skin thickening at level of fetal skull, pleural effusions, ascites | NT normal | Y(Needle drainage of pleural effusion; thoracoamniotic shunt placement; Needle drainage of ascites; amnioreduction) | | Delivery at 37+4w, newborn survival | Negative | Negative | |
| 25 | 1 | 30 | 30+4 | Pleural effusions, ascites | NT=1.1mm,  Absent of stomach bubble | N | | Cesarean delivery at 32+3w, neonatal death | Negative | Negative | |
| 26 | 1 | 30 | 22+1 | Skin edema, pleural effusions, ascites | NT normal,  Left hydronephrosis | N | | Cesarean delivery at 34+3w, neonatal death | Negative | Negative | |
| 27 | 2 | 27 | 20+2 | Skin edema, pleural effusions, ascites | NT=1.1mm | N | | TOP | Negative | Negative | |
| 28 | 1 | 26 | 25 | Skin edema, pleural effusions, ascites | NT=0.9mm Hand-clenching | N | | TOP | Negative | Negative | |

*†* Y, prenatal therapeutic management was performed on fetuses; N, prenatal therapeutic management was not performed.

*‡* Pregnancy outcome is included TOP, IUFD (Intra uterine fetal death), newborn survival, neonatal death.