

| Authors | Diagnosis confirmed by <i>GATA1</i> mutation analysis*** | Gestational stage | Presenting clinical features | Trisomy 21 | Prenatal testing - leucocytosis and / or thrombocytopenia | Sample size | Diagnostic method | Prospective diagnosis of TAM | Prenatal treatment of TAM | Fetal outcome / timing of delivery |
|----------------------------|--|------------------------------|---|------------|--|-------------|--------------------------------------|------------------------------|---|---|
| Zerres et al, 1990 (10) | #1 No | #1 3 rd trimester | #1 - Non-immune hydrops, ascites, pericardial effusion | #1 Yes | #1 Leucocytosis, blast cell predominance | 2 | #1 Ultrasound, fetal blood sampling | #1 Yes | #1 No | #1 Alive at 2y. Delivery time not reported |
| | | #2 3 rd trimester | #2 – Non-immune fetal hydrops, cardiac abnormalities | #2 Yes | #2 Leucocytosis, blast cell predominance | | #2 Ultrasound, fetal blood sampling | #2 Yes | #2 No | #2 Died 5m. Delivery time not reported |
| Foucar et al, 1992 (11) | #1 No | #1 3 rd trimester | #1 Duodenal atresia, polyhydramnios. | #1 Yes | #1 Not thrombocytopenic. Leucocytosis, blast cell predominance | 2 | #1 - Ultrasound Fetal blood sampling | #1 Yes | #1 No | #1 Alive 11w post duodenal repair. Preterm (32w). |
| | #2 No | #2 3 rd trimester | #2 – Pericardial effusion | #2 Yes | #2 Thrombocytopenic. Leucocytosis, blast cell predominance | | #2 Ultrasound, fetal blood sampling | #2 Yes | #2 No | #2 Alive 5w. Preterm (36w). |
| Hendricks et al, 1993 (12) | #1 No | #1 2 nd trimester | #1 Mild ascites, pericardial effusion. | #1 Yes | #1 Thrombocytopenic. Leucocytosis, blast cells present | 1 | #1 Ultrasound, fetal blood test | #1 No | #1 No | #1 IUFD (28w) |
| Macones et al, 1995 (13) | #1 No | #1 2 nd trimester | #1 - Hepatosplenomegaly, fetal hydrops, ascites. | #1 Yes | #1 Thrombocytopenic. Leucocytosis – blast predominance | 2 | #1 Ultrasound, fetal blood sampling | #1 No | #1 No | #1 IUFD (29w) |
| | #2 No | #2 3 rd trimester | #2 – Pericardial effusion, hepatosplenomegaly. | #2 Yes | #2 Thrombocytopenia, Leucocytosis, blast cells predominant | | #2 Ultrasound, fetal blood sampling | #2 Yes | #2 No | #2 Alive at 5w. Preterm (~31w). |
| Strobelt et al, 1995 (14) | #1 No | #1 3 rd trimester | #1 Hepatosplenomegaly, hydrops fetalis and pericardial effusion | #1 Yes | #1 Thrombocytopenic. Leucocytosis, blast cell predominance | 1 | #1 Ultrasound, fetal blood sampling | #1 Yes | #1 Yes - Therapeutic pericardiocentesis | #1 Alive at 1m. Preterm |

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| | | | | | | | | | (33w) | (35w). |
| Baschat et al, 1998 (15) | #1 No | #1 2 nd trimester | #1 Hepatosplenomegaly, hydrops fetalis, and oligohydramnios. | #1 Yes | #1 Thrombocytopenic. Leucocytosis, blast cell predominance. Raised lactate dehydrogenase | 1 | #1 Ultrasound, Doppler, echocardiogram, amniocentesis, fetal blood testing and | #1 Yes | #1 No | #1 IUFD (~32w) |
| Hartung et al, 1998 (16) | #1 No | #1 3 rd trimester | #1 Hepatosplenomegaly, abnormal blood flow, oligohydramnios | #1 Yes | #1 Postnatal leucocytosis, blast cell predominance | 1 | #1 Ultrasound, doppler | #1 No | #1 No | #1 Alive 6w postnatally. Preterm (~31w) |
| Siva et al, 1999 (17) | #1 No | #1 2 nd trimester | #1 Cardiomegaly, pericardial effusion, tricuspid regurgitation, hepatosplenomegaly | #1 Yes postnatal | #1 Parents declined prenatal blood tests. Postnatally; leucocytosis, blast cell predominance | 1 | #1 Ultrasound, doppler | #1 Yes | #1 No | #1 Alive at 4m. Born at term (38w) |
| Hirashima et al, 2000 (18) | #1 No | #1 3 rd trimester | #1 Pericardial effusion | #1 Yes postnatal | #1 Postnatal thrombocytopenia and leucocytosis, blast cell predominance | 1 | #1 Ultrasound | #1 No | #1 No | #1 Alive at 127d. Preterm (35w) |
| Smrcek et al, 2001 (19) | #1 No | #1 3 rd trimester | #1 Hepatosplenomegaly and hydrops fetalis | #1 Yes | #1 Thrombocytopenia. Leukocytosis, blast cell predominance | 4 | #1 Ultrasound, Doppler, fetal blood sampling | #1 Yes | #1 No | #1 Stillbirth |
| | #2 No | #2 2 nd trimester | #2 Pleural and pericardial effusion, hepatosplenomegaly and oligohydramnios | #2 Yes | #2 Thrombocytopenia Marked leucocytosis, blast cell predominance | | #2 Ultrasound, doppler, fetal blood sampling. | #2 Yes | #2 No | #2 IUFD (~32w) |
| | #3 No | #3 3 rd trimester | #3 Hepatosplenomegaly, hydrops fetalis. | #3 Yes | #3 Marked thrombocytopenia. Marked leukocytosis, blast cell predominance | | #3 Ultrasound, doppler, amniocentesis, fetal blood sampling. | #3 Yes | #3 No | #3 IUFD (28w) |
| | #4 No | #4 3 rd trimester | #4 Hepatosplenomegaly, hydrops fetalis | #4 No failed postnatal sample | #4 At post-mortem, leucocytosis with blast cell predominance on peripheral smear. | | #4 Ultrasound, doppler | #4 Yes | #4 No | #4 IUFD (~30w) |
| Hamada et al, 2001 (20) | #1 No | #1 3 rd trimester | #1 Echogenic hepatomegaly | #1 Yes postnatal | #1 Postnatal leucocytosis, with blast cell predominance. | 2 | #1 Ultrasound | #1 No | #1 No | #1 Died 33d postnatal. Preterm (36+5) |

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| | #2 No | #2 3 rd trimester | #2 Cardiomegaly and pericardial effusion, splenomegaly and echogenic hepatomegaly. | #2 Yes postnatal | #2 Postnatal leucocytosis, with blast cell predominance | | #2 Ultrasound | #2 No | #2 No | #2 Died 31d. Term (~38w) |
| Azancot et al, 2003 (21) | #1 No | #1 3 rd trimester | #1 Pericardial effusion, abnormal cardiac / diastolic function | #1 Yes | #1 Thrombocytopenia, leucocytosis, with blast cell predominance | 1 | #1 Ultrasound doppler echocardiogram, amniocentesis, fetal blood sampling and pericardiocentesis | #1 Yes | #1 No | #1 TOP (32w) (autopsy declined) |
| Vimercati et al, 2003 (22) | #1 No | #1 2 nd trimester | #1 Hepatic echogenic foci | #1 Yes | #1 Borderline thrombocytopenia, mild leucocytosis with 16% blast cells predominance, deranged liver function tests | 1 | #1 Ultrasound, fetal blood sampling (23w) TORCH negative | #1 No | #1 No | #1 TOP (gestation unknown) |
| Robertson et al, 2003 (23) | #1 No | #1 2 nd trimester | #1 Hepatosplenomegaly, pleural effusion, hydrops fetalis, skin oedema, ascites | #1 Yes | #1 Leucocytosis, blast predominance | 1 | #1 Ultrasound, fetal blood sampling | #1 Yes | #1 No | #1 IUFD (27w) |
| Ogawa et al, 2004 (24) | #1 No | #1 - 3 rd trimester | #1 Hepatosplenomegaly and pleural effusion | #1 Yes | #1 Postnatal leucocytosis, blast cell predominance, thrombocytosis, deranged liver function | 3 | #1 Ultrasound | #1 No | #1 No | #1 Died 4w. Preterm (30 w) |
| | #2 No | #2 - 3 rd trimester | #2 Hepatosplenomegaly | #2 Yes postnatal | #2 Postnatal leucocytosis, blast cell predominance, thrombocytopenia, deranged liver function | | #2 Ultrasound | #2 No | #2 No | #2 Alive (2 m). Term (39w) |
| | #3 No | #3 - 3 rd trimester | #3 Hepatosplenomegaly | #3 Yes | #3 Postnatal mild leucocytosis, and blaststosis. Positive blasts on blood film. | | #3 Ultrasound | #3 No | #3 No | #3 Alive (2w). Term (37w) |

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| Hojo et al, 2007 (25) | #1 – 6 No | #1 – 6 3 rd trimester | #1 – 6 Hydrops with hepatomegaly in four cases, and isolated hepatomegaly in two cases | #1 Yes | #1 – 6 Thrombocytopenia in 5 cases. Deranged liver function in 6 with hypoalbuminemia in 4. Leukocytosis in 6, with blast predominance | 7 | #1 Ultrasound, Doppler, echocardiogram and fetal blood sampling | #1 – 6 Yes in 6 cases | #1 – 6 No | #1 – 6 1 IUFD 2 neonatal deaths 1 infant death (3y) 2 alive. 2 term (~37w), 4 preterm (31w-32w range) |
| Kikuchi et al, 2007 (26) | #1 No #2 No #3 No | #1 3 rd trimester #2 3 rd trimester #3 3 rd trimester | #1 Echogenic hepatosplenomegaly #2 Echogenic hepatosplenomegaly, pericardial effusion #3 Tetralogy of Fallot, oligohydramnios and echogenic hepatosplenomegaly | #1 Yes postnatal #2 Yes postnatal #3 Yes | #1 Postnatal leucocytosis with 10.9% blast cells. #2 Postnatal leucocytosis with blast cell predominance. #3 Postnatal leucocytosis with 9% blast cells. | 3 | #1 Ultrasound #2 Ultrasound #3 Ultrasound, amniocentesis | #1 No #2 No #3 No | #1 No #2 No #3 No | #1 Died 33d. Preterm (33w) #2 Died 108d. Term #3 Alive at 1y. Term |
| Chen et al, 2009 [25] | #1 GATA1 negative | #1 3 rd trimester | #1 Fetal ascites, hepatosplenomegaly | #1 Yes | #1 Not thrombocytopenic. Leucocytosis, blast predominance. Deranged liver function. | 1 | #1 Ultrasound and fetal blood sampling | #1 Yes | #1 No | #1 IUFD (36w) |
| Kim et al, 2009 (28) | #1 No | #1 3 rd trimester | #1 Echogenic hepatomegaly and hydrops fetalis | #1 Yes | #1 Thrombocytopenic. Leucocytosis, blast predominance. Deranged liver function | 1 | #1 Ultrasound, Doppler, fetal blood sampling | #1 Yes | #1 No | #1 IUFD (30w) |
| Malin et al, 2010 (29) | #1 GATA1 positive | #1 3 rd trimester | #1 Non-immune fetal hydrops | #1 Yes | #1 Thrombocytopenic. Leucocytosis, blast predominance. Deranged liver function | 1 | #1 Ultrasound, fetal blood sampling | #1 Yes | #1 Yes serial blood transfusions for fetal anaemia | #1 Neonatal death. Preterm (35w). |

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| Sukur et al, 2011 (30) | #1 No | #1 2 nd trimester | #1 Fetal hydrops, cardiomegaly, oligohydramnios, cardiac arrhythmia. | #1 Yes | #1 Thrombocytopenic. Anaemia and leucopenia (lymphocyte predominant) | 1 | #1 Ultrasound, fetal blood sampling. | Yes | #1 Yes blood transfusion via umbilical cord (28 w) for worsening fetal pancytopenia | IUFD (29w) |
| Mancuso et al, 2014 (31) | #1 No | #1 3 rd trimester | #1 Hepatosplenomegaly, hepatic echogenic foci, fetal hydrops | #1 Yes | #1 Postnatal leucocytosis, with blast cell predominance. Deranged liver function. | 1 | #1 Ultrasound, amniocentesis | No | #1 No | #1 Died 1m postnatal. Preterm (36w) |

Table S1. Summary of studies reporting cases of prenatal-onset TAM**

(IUFD; intrauterine fetal death, m; months, w; weeks, d; days, TOP; termination of pregnancy)

** Note that the diagnosis of TAM, requires the presence of increased peripheral blood blasts since there are other the clinical features are not specific for TAM.

*** It is now clear that all cases of TAM have an acquired mutation in exon 2 or 3 of the GATA1 gene which disappears when TAM enters complete remission and therefore GATA1 mutation analysis should be performed to confirm the diagnosis in all cases of suspected TAM.