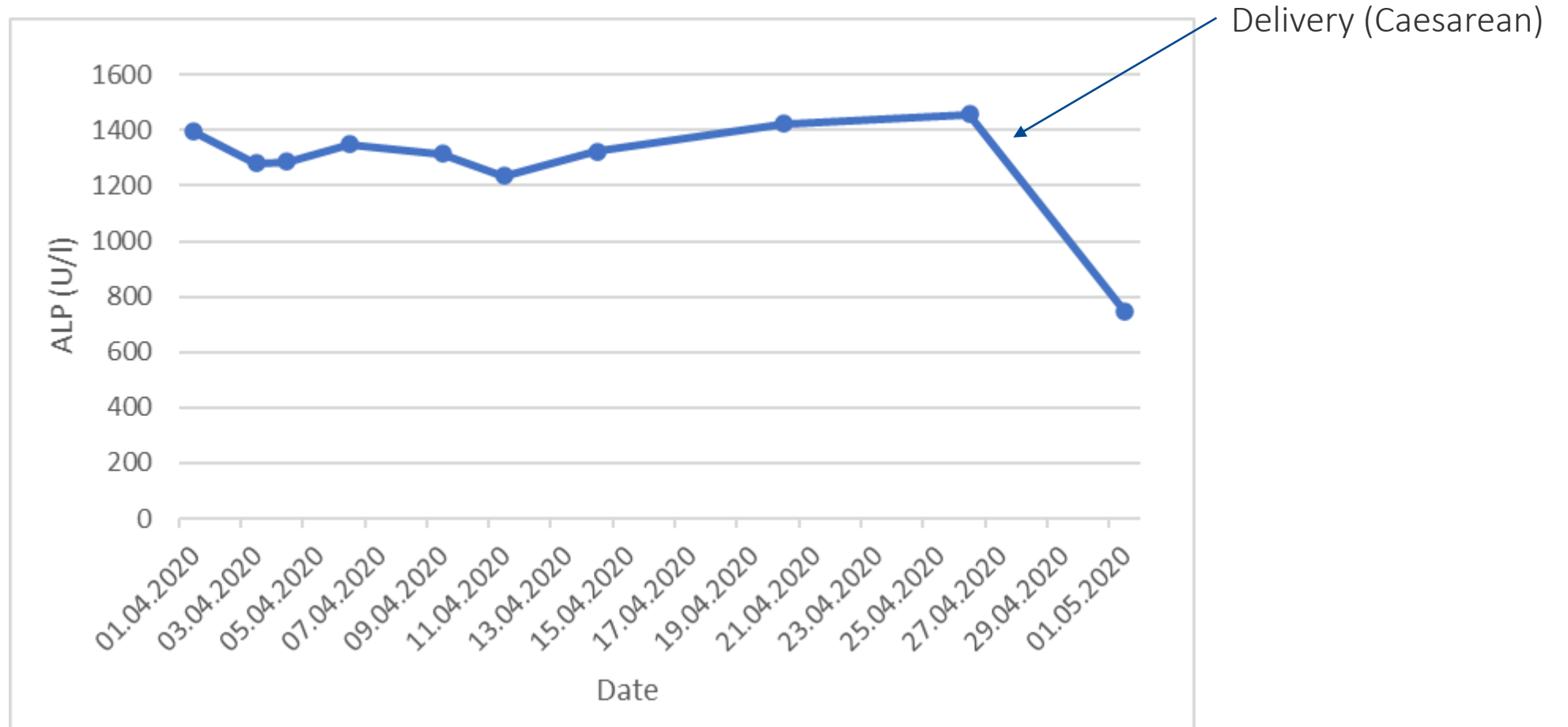


Marked ALP elevation in pregnancy

- **Clinical presentation**

- 37 year-old woman, G3P0, pregnancy 35+0 weeks
- For three weeks generalized pruritus mainly during daytime, not palmar or plantar
- Isolated elevation of alkaline phosphatase (1285-1500 U/l), normal ALP level reported in 06/2019
- Free bile acids tested twice within the normal range (5,5 µg/l)
- Ultrasound of the mother's liver: no signs of cholestasis
- Further lab examination normal (especially total bilirubin, ALT, AST, gGT), bone-derived ALP within normal range
- Doppler ultrasound of the unborn child did not show any abnormalities, CTG mainly normal (one deceleration)
- No proteinuria, no hypertension, no signs of HELLP
- Had wanted to have children since 2015: 7xICSI, 2 early abortions 2016/2017

Laboratory trend



- **Further clinical course**

- ALP decreased after delivery, histology of the placenta did not show any pathologies, mother and child are in good health after caesarean procedure

- **Summary**

- This is a case of extremely high elevation of isolated ALP during pregnancy
- In uncertain cases, special laboratories offer determination ALP of placental origin
- Knowledge about extremely high elevation of placenta-derived ALP is limited to case reports
 - Association to preterm birth is reported in some cases
 - Close monitoring of foetal and maternal health is recommended

- **Examples of other reports of isolated ALP elevation during pregnancy in the literature:**

- Zachary S et al. Extreme elevations of alkaline phosphatase in pregnancy: A case report. Case Reports in Women's Health 27 (2020) e00214. <https://doi.org/10.1016/j.crwh.2020.e00214>
- Bashiri A et al. Positive placental staining for alkaline phosphatase corresponding with extreme elevation of serum alkaline phosphatase during pregnancy. Arch Gynecol Obstet (2007) 275:211–214 DOI 10.1007/s00404-006-0212-5