Prenatal diagnosis of major chromosomal aberrations in the era of NIPT (Non-invasive prenatal testing): What could we miss?

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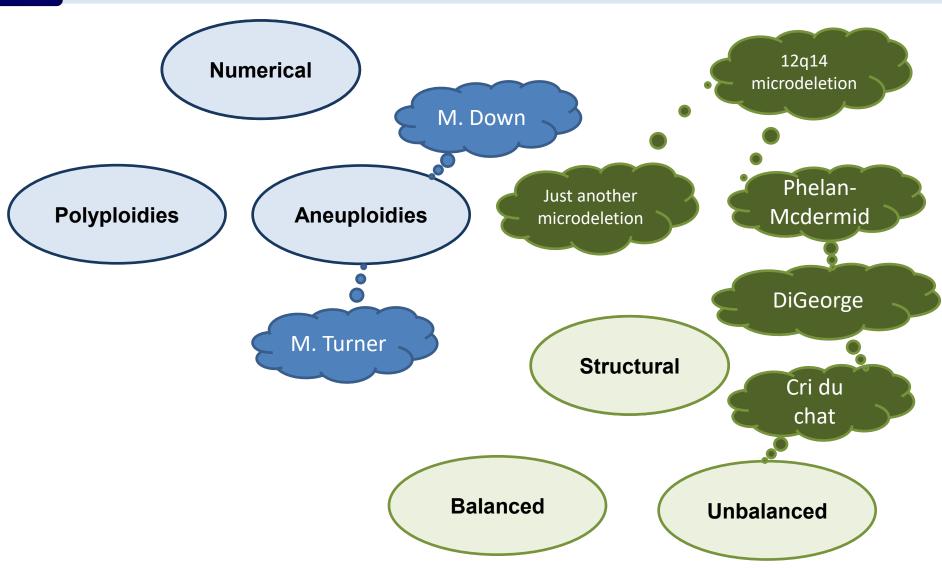




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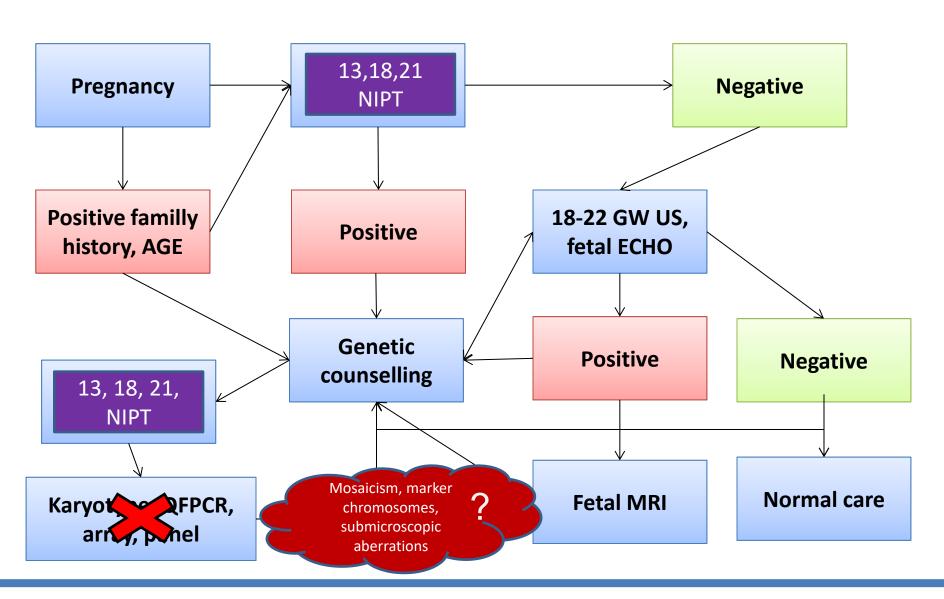


Chromosomal aberrations



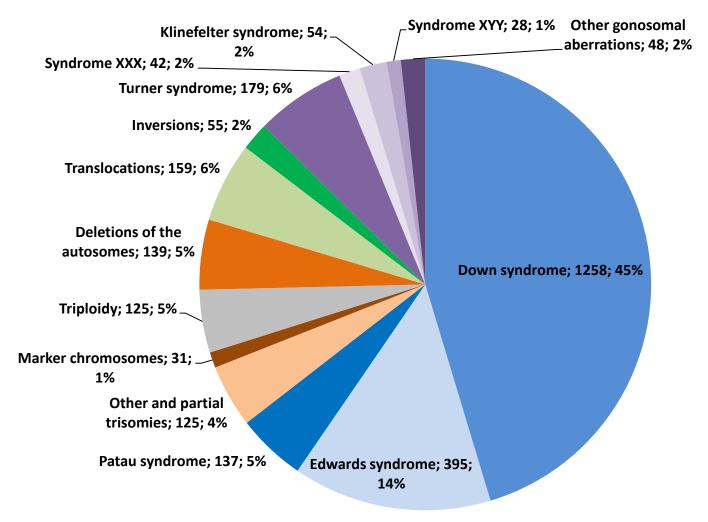


Prenatal diagnostics strategy – Czech Republic



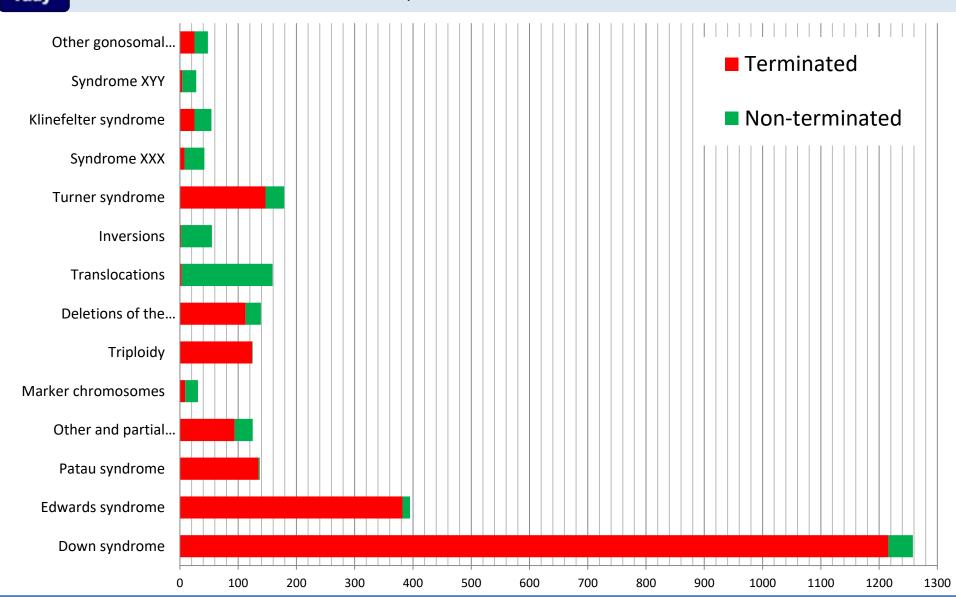


Prenatal diagnostics of chromosomal aberrations in the Czech Republic: 2012-2016; all aberrations



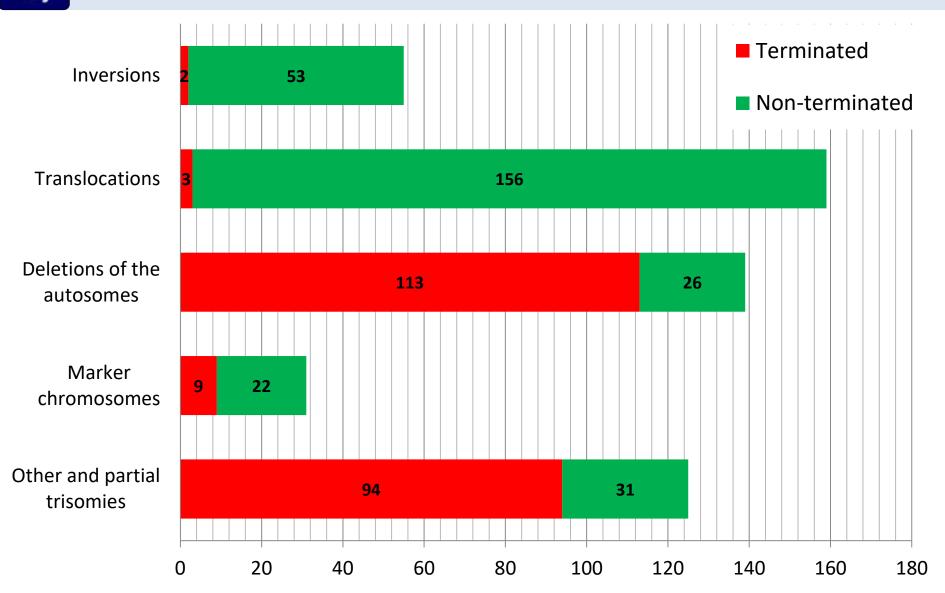


Prenatal diagnostics of chromosomal aberrations in the Czech Republic: 2012-2016; all aberrations - details



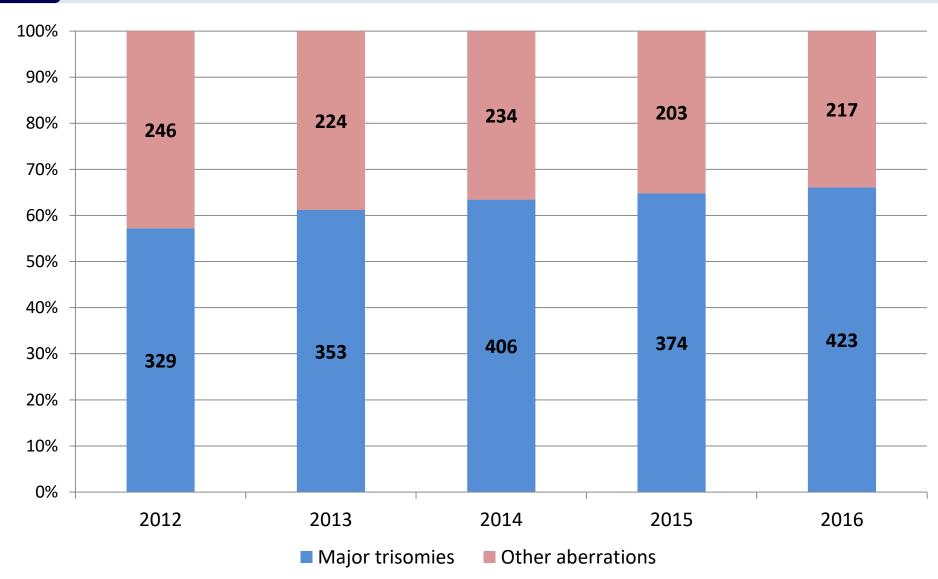


Prenatal diagnostics of chromosomal aberrations in the Czech Republic: 2012-2016; structural aberrations - details



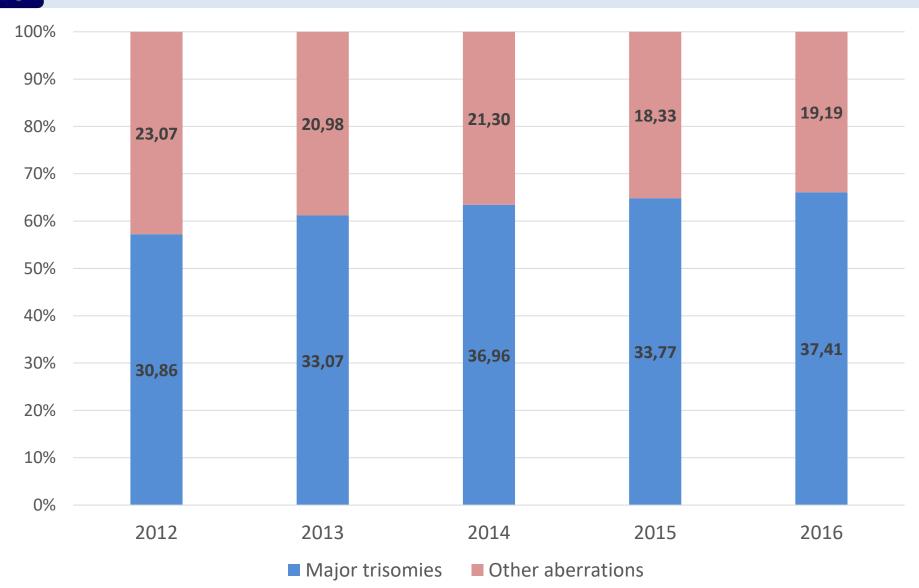


Prenatal diagnostics of chromosomal aberrations in the Czech Republic: 2012-2016; Major trisomies vs other aberrations





Prenatal diagnostics of chromosomal aberrations in the Czech Republic: 2012-2016; Major trisomies vs other aberrations





Conclusion

- Nearly 2/3 of all cases of prenatally diagnosed chromosomal aberrations are the trisomies 13, 18 and 21.
- Rest (1/3) of the cases are either the anomalies of the gonosomes, polyploidies or structural chromosomal aberrations.
- Currently, we are not fully able to analyse the group of structural aberrations in detail (microdeletion or microduplication syndrome), this can change in near future.
- The proportion of major trisomies is slowly increasing during last years. The role of NIPT in this trend is tricky to evaluate (other factors: role of increasing maternal age and role of still improving conventional screening methods).



Thank you

Thank you for your attention









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