PRODUCT PROBLEMS IN COMPANION DIAGNOSTIC TESTS (CDX) – ANALYSIS OF FIELD SAFETY NOTES PUBLISHED BY BFARM UNTIL END 2022

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Introduction: Regulation (EU) 2017/746 of the European Parliament and of the Council stipulates marketing/market surveillance of in vitro diagnostics (IVD) in Europe. In cases of incidents and Field Safety Corrective Actions (FSCA) manufacturers have to inform the responsible Competent Authority (D: BfArM) and the public by Field Safety Notices (FSN).

Materials and methods: FSCA/FSN for CDx published by BfArM (https://www.bfarm.de/SiteGlobals/Forms/Suche/Expertensuche_Formular.html?nn=597716&cl2Categories_Format=kundeninfo) were analyzed. CDx were defined according published lists (FDA: https://www.fda.gov/medical-devices/in-vitro-diagnostics/list-cleared-or-approved-companion-diagnostic-devices-in-vitro-and-imaging-tools and VfA: https://www.vfa.de/de/arzneimittel-forschung/datenbanken-zu-arzneimitteln/individualisierte-medizin.html).

Results: Out of 3417 FSCA for IVD 39 FSCA were for CDx (28/11 for molecular/immunological tests). 38 were oncological CDx, mostly K-RAS (7), HER-2 (6), EGFR (5), BRAF (3), BCR-ABL (3) and estrogen receptor (3), but also ALK, FGFR, MYC, PD-L1, PIK3CA, E2A (TCF3), TCL1, progesterone receptor, Ki-67 und GATA2 (each 1). Product problems (multiple entries) were typically high/false-positive results (13), low/false-negative results (12), no/invalid results (10) or erroneous results (3). Corrective measures were (multiple entries) FSN (39, including information for problem handling), recall (26), sample retesting (26), modification of the instructions for use (6) and software-upgrade (2).

Conclusions: FSCA for CDx reflect an important subset of all FSCA and mostly serve for oncological diagnostics. FSN are important for risk reduction in case of CDx product problems.