Trastuzumab-based therapy has been shown to confer overall survival benefit in HER2-positive patients with advanced gastric cancer in a large multicentric trial (ToGA study). Subgroup analysis identified adenocarcinomas of the stomach and gastroesophageal (GE) junction with overexpression of HER2 according to immunohistochemistry (IHC) as potential responders. Due to recent approval of trastuzumab for HER2 positive metastatic gastric and GE-junction cancer in Europe (EMEA) HER2 diagnostics is now mandatory with IHC being the primary test followed by fluorescence in situ hybridization (FISH) in IHC2+ cases. However, in order to not miss patients potentially responding to targeted therapy determination of a HER2-positive status for gastric cancer required modification of scoring as had been proposed in a pre-ToGA study. To validate this new HER2 status testing procedure in terms of inter-laboratory and inter-observer consensus for IHC scoring a series of 547 gastric cancer tissue samples on a tissue microarray(TMA) was used. In the first step, 30 representative cores were used to identify specific IHC HER2 scoring issues among eight French and German laboratories, while in the second step the full set of 547 cores was used to determine IHC HER2
intensity and area score concordance between six German pathologists. Specific issues relating to
discordance were identified and recommendations formulated which proved to be effective to reliably
determine HER2 status in a prospective test series of 447 diagnostic gastric cancer specimens.

Zeitschriftentitel / Abkürzung:
Virchows Arch

Jahr:
2010

Band:
457

Heft / Issue:
3

Seiten:
299-307

Sprache:
eng

Pubmed:

Print-ISSN:
0945-6317

TUM Einrichtung:
r Allgemeine Pathologie und pathologische Anatomie

Occurences:
- Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Institut für Allgemeine
  Pathologie und Pathologische Anatomie > 2010

entries: