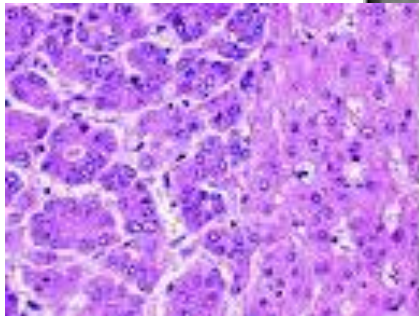
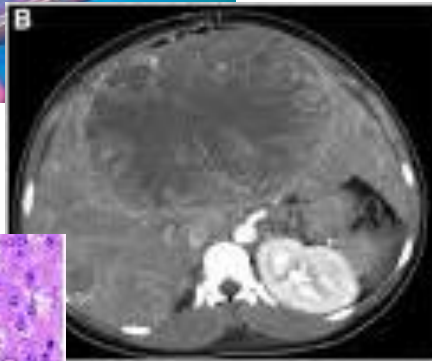
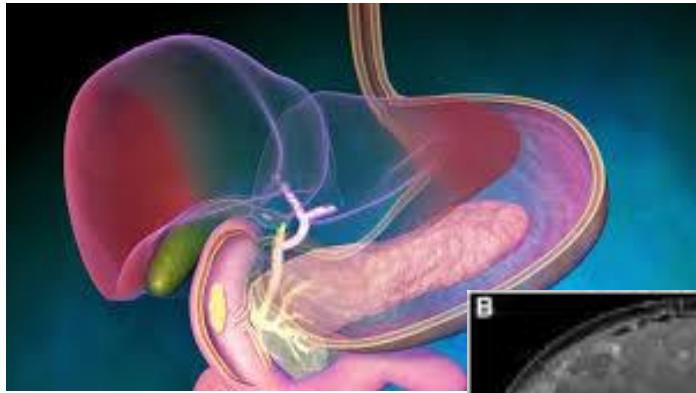


Aktuelle Trends und Empfehlungen bei der Behandlung gastrointestinaler Tumoren



SHG-Tagung

Paracelsus-Klinik Scheidegg

05. Januar 2018

Themen

- **Kolonkarzinom - Adjuvante Therapie des KRK – reduzierte Therapiedauer??**
- **Kolonkarzinom - Einsatz von TKIs / Immun-Checkpoint-Inhibitoren in der palliativen Therapie**
- **Neue Therapieoptionen beim Pankreaskarzinom**
- **Systemische Therapie des HCC – seit über 10 Jahren neue Therapieoptionen**
- **Adjuvante Therapie von Gallenwegstumoren – neuer Standard??**
- **Perioperative Therapie des Magen-CAs – FLOT neuer Standard**

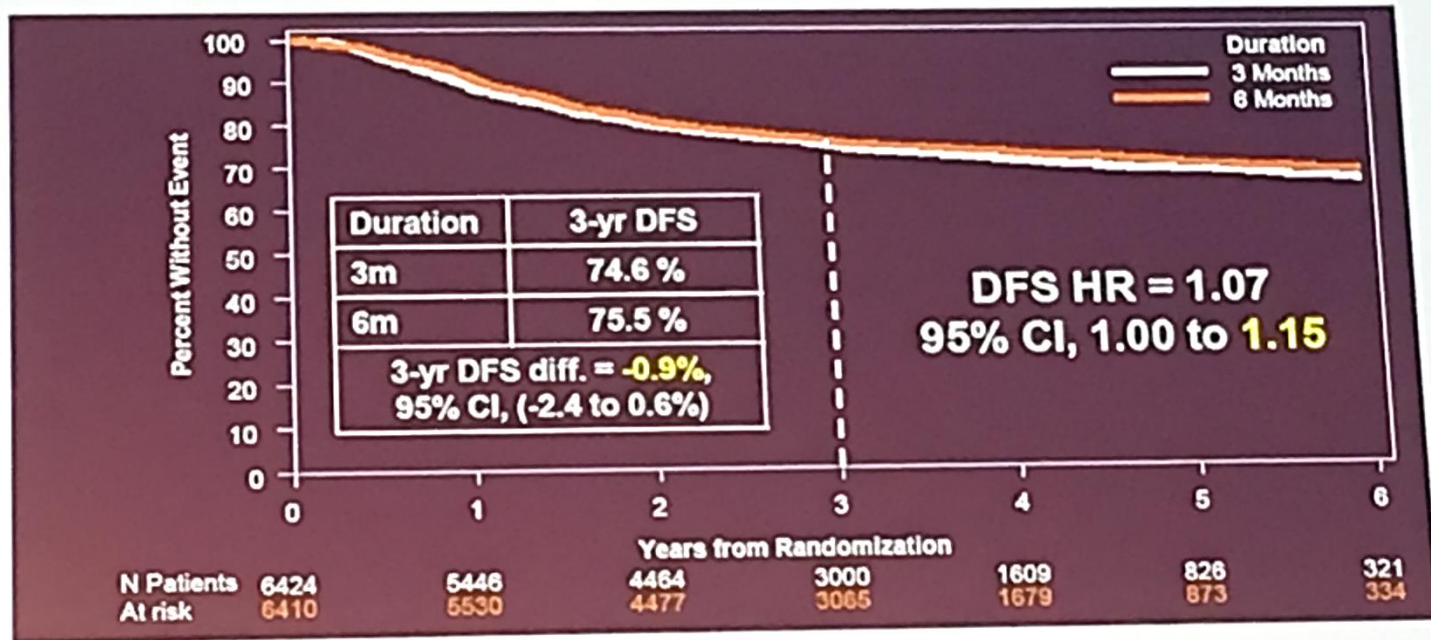
Adjuvant Oxaliplatin-based therapy (3 vs. 6 months) in Stage III Colon Cancer

Trial	Regimen(s)	Stage III Colon Cancer Patients*	Enrolling Country
TOSCA	CAPOX or FOLFOX4	2402	Italy
SCOT	CAPOX or mFOLFOX6	3983	UK, Denmark, Spain, Australia Sweden, New Zealand
IDEA France	CAPOX or mFOLFOX6	2010	France
C80702	mFOLFOX6	2440	US, Canada
HORG	CAPOX or FOLFOX4	708	Greece
ACHIEVE	CAPOX or mFOLFOX6	1291	Japan

No patients:
12,834

Total DFS events: 3,263
 ECOG 0/ 1 79% / 21%
 N1/ N2 72% / 28%
 T1+2/ 3/ 4 13/ 66/ 21%
 FOLFOX/ CAPOX 60 / 40%

Adjuvant Oxaliplatin-based therapy (3 vs. 6 months) in Stage III Colon Cancer: DFS

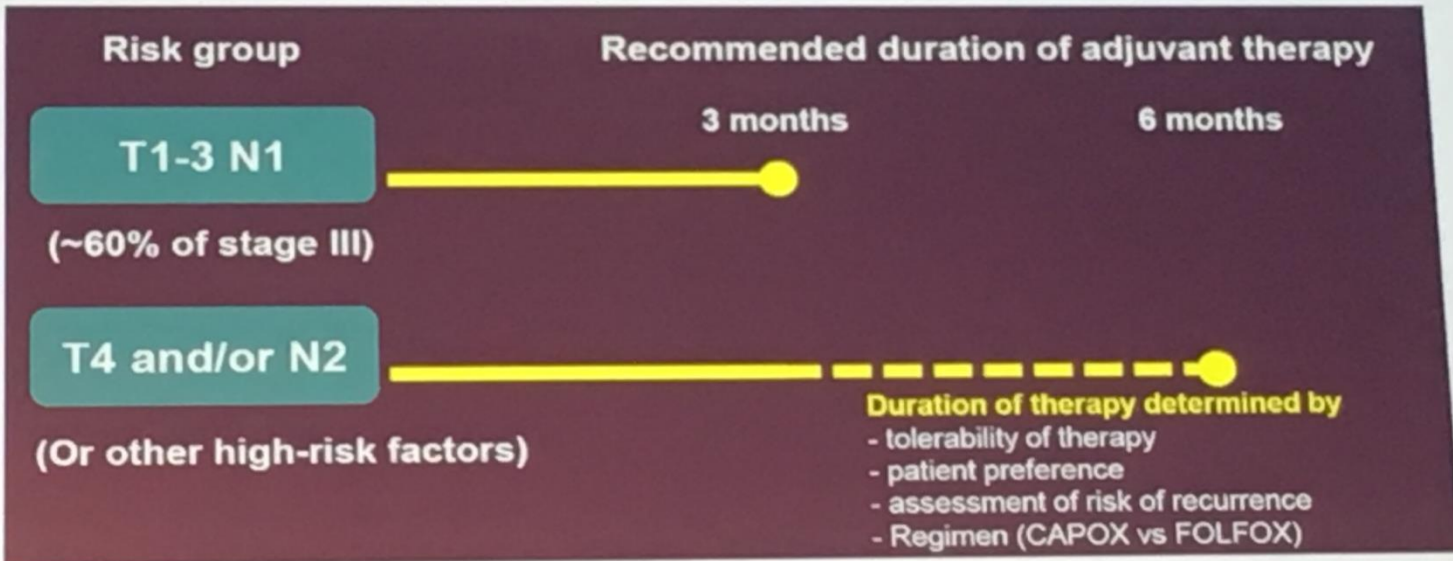


Non-inferiority „statistisch nicht erreicht“ aber...

Adjuvant Oxaliplatin-based therapy (3 vs. 6 months) in Stage III Colon Cancer

Adverse Events	FOLFOX			CAPOX		
	3m Arm	6m Arm	p-value ¹	3m Arm	6m Arm	p-value ¹
Overall						
G2	32%	32%	<.0001	41%	48%	<.0001
G3-4	38%	57%		24%	37%	
Neurotoxicity						
G2	14%	32%	<.0001	12%	36%	<.0001
G3-4	3%	16%		3%	9%	
Diarrhea						
G2	11%	13%	<.0001	10%	13%	0.0117
G3-4	5%	7%		7%	9%	

Adjuvant Oxaliplatin-based therapy (3 vs. 6 months) in Stage III Colon Cancer

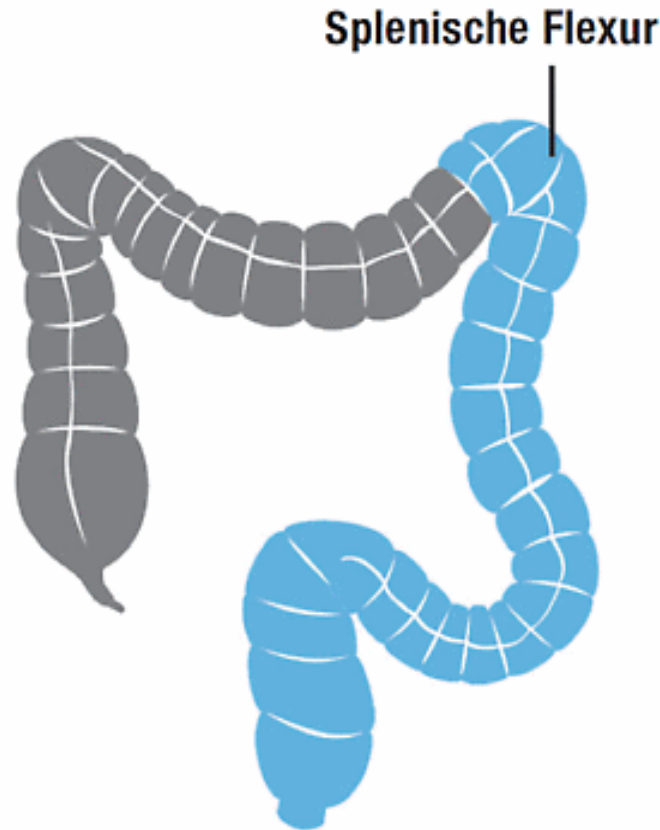


Consensus of IDEA collaborators: Risk-based approach to CRC stage III

Lokalisation von Darmtumoren und deren Häufigkeit

Rechtes Kolon 20–25 %

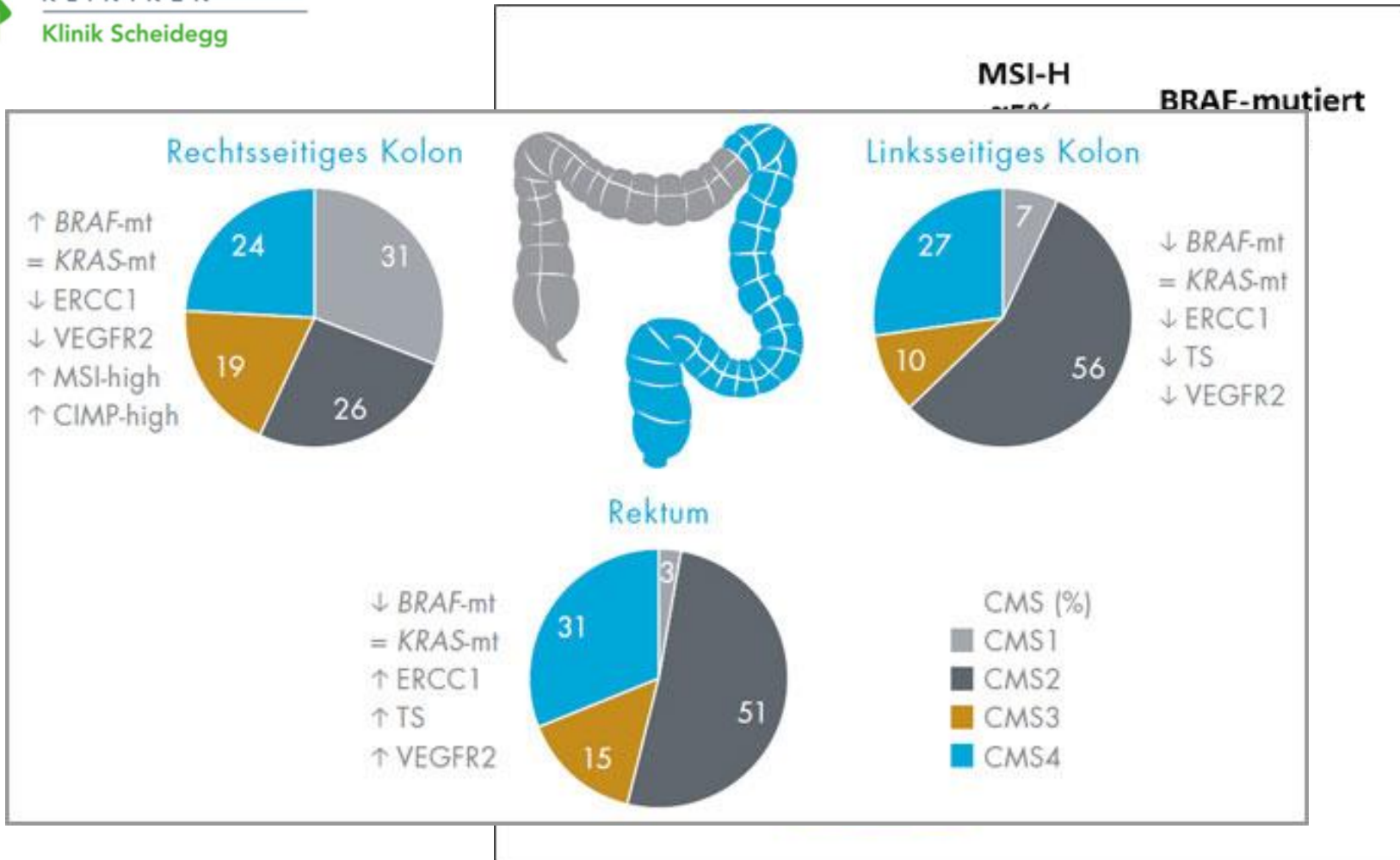
- Niedrigere Inzidenz
- Häufiger bei Frauen
- Höheres TNM, größere Tumoren, häufiger muzinös
- Stärker immunogen
- Vorwiegend CIMP, MSI, BRAF
- Kürzeres Überleben

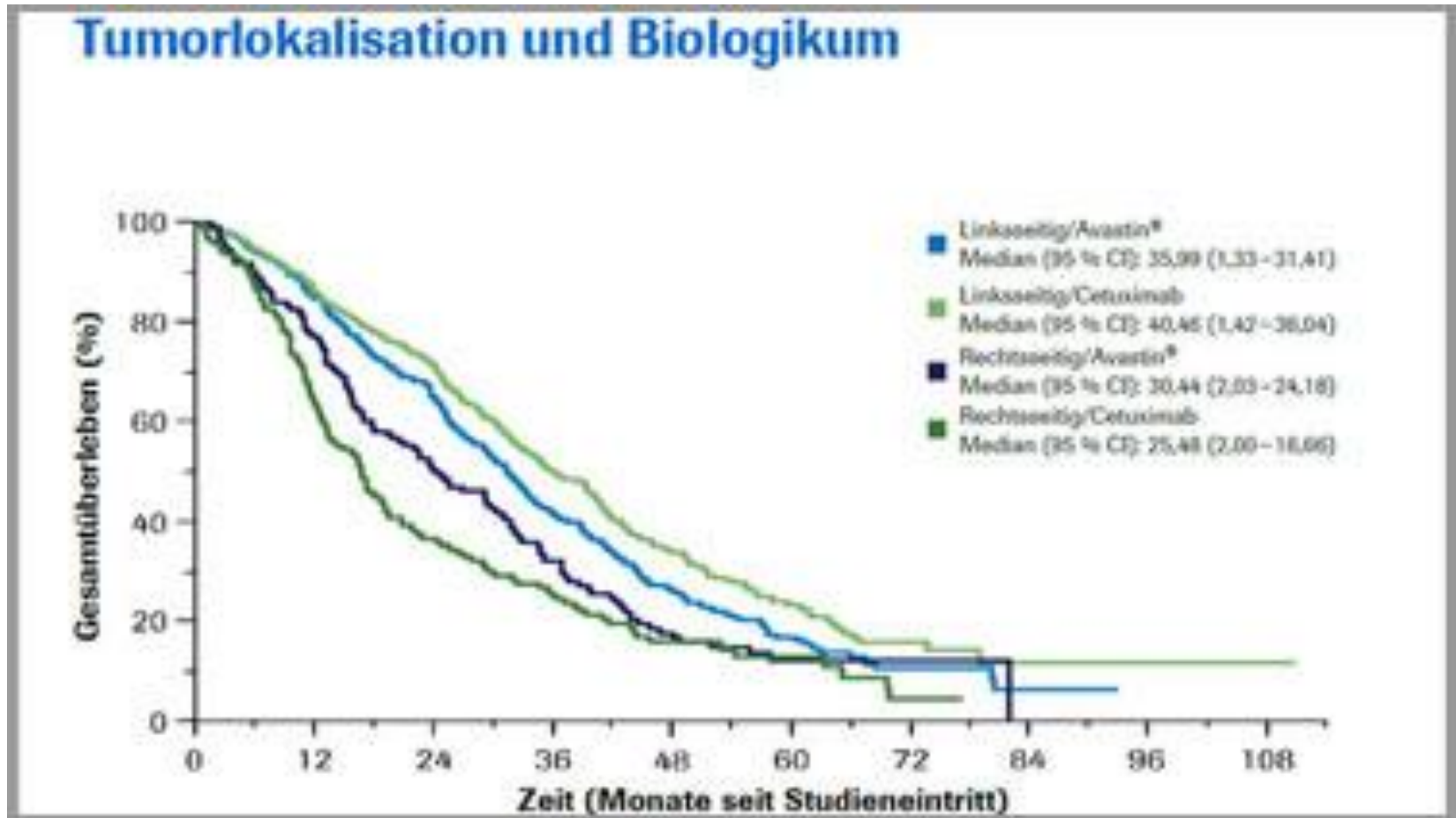


Linkes Kolon 75–80 %

- Häufiger
- Häufiger bei Männern
- Niedriges TNM, kleinere Tumoren
- Weniger immunogen
- Vorwiegend chromosomal instabil
- Längeres Überleben

Kolonkarzinom - Palliative Therapie

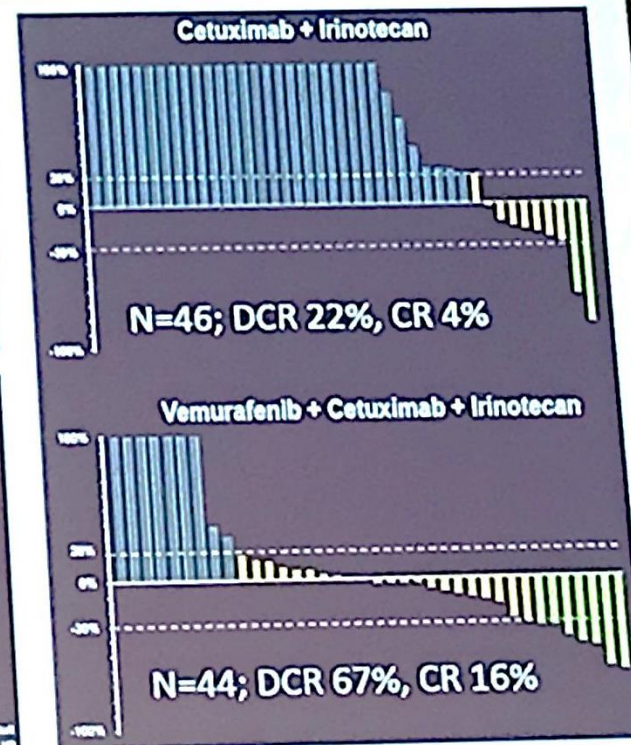
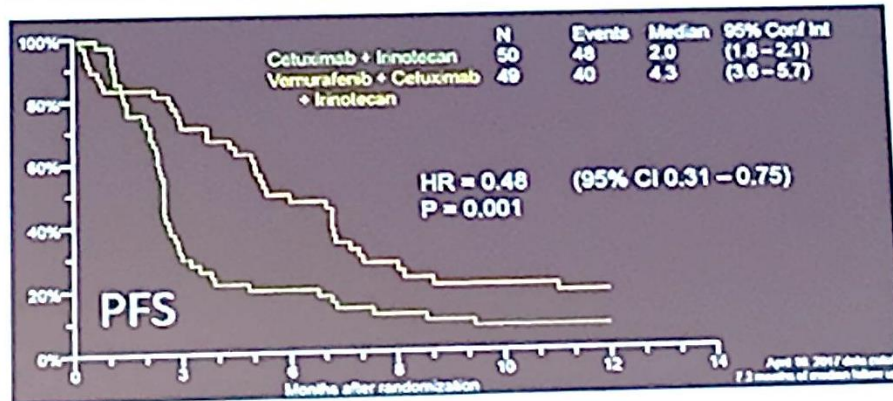
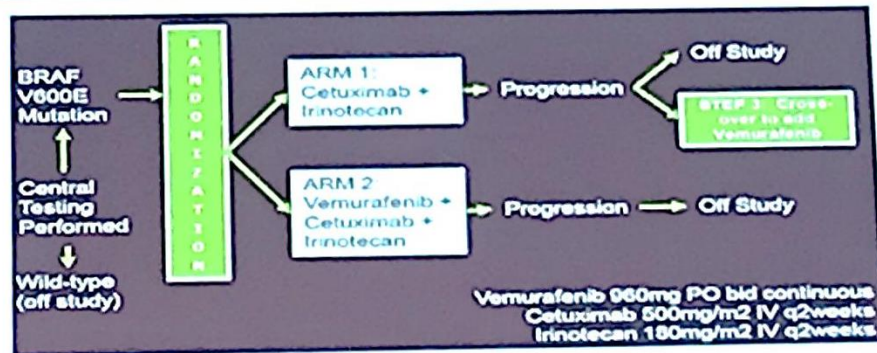




Kolonkarzinom - Palliative Therapie

TKI bei BRAF V600E mut.

Randomized trial of irinotecan and cetuximab with or without vemurafenib in *BRAF*-mut. mCRC (SWOG S1406)



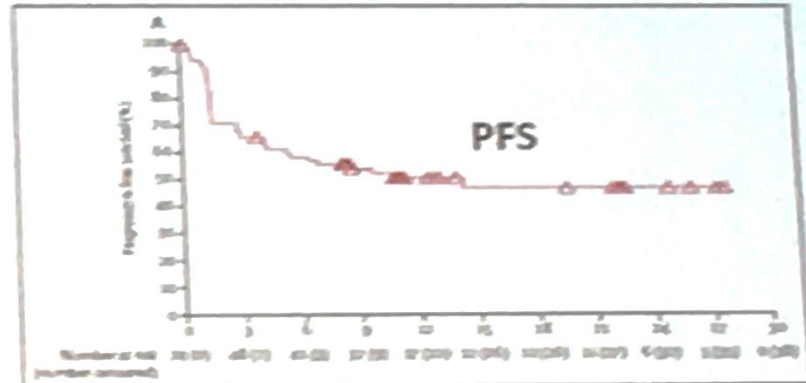
Kolonkarzinom - Palliative Therapie

Nivolumab – Checkpoint-Inhibition

Nivolumab in patients with metastatic DNA mismatch repair-deficient or microsatellite instability-high colorectal cancer (CheckMate 142): an open-label, multicentre, phase 2 study

Michael J Overman, Roy McDermott, Joseph L Leach, Sara Lonardi, Heinz-Josef Lenz, Michael A Morse, Joyesh Deoi, Andrew Hill, Michael Axelson, Rebecca A Moss, Monica V Goldberg, Z Alexander Cao, Jean-Marie Lelonec, Gregory A Magjate, Scott Kopetz, Thierry André**

- Phase 2 study; 74 pts dMMR/MSI-H metastatic pretreated CRC
- RR 31%, DCR 67%
- Duration of response not reached; --> long-term survival



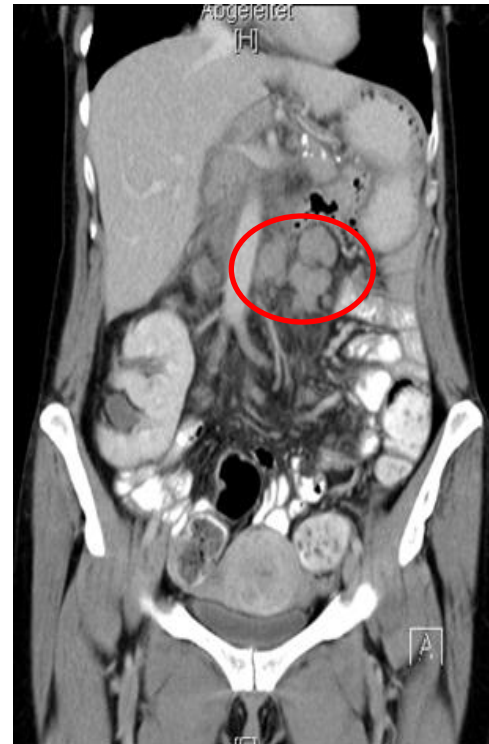
DNA mismatch repair deficient (dMMR)/microsatellite instability-high (MSI-H) metastatic CRC (about 5% of patients) are a distinct biomarker-defined population who benefit less from conventional chemotherapy and have a shorter OS than do patients with proficient MMR (pMMR), higher mutational burden and tumour neoantigen load, dense immune cell infiltration.

Kolonkarzinom - Palliative Therapie

Immunologische Therapieansätze – Bedeutung für die onkolog. Reha

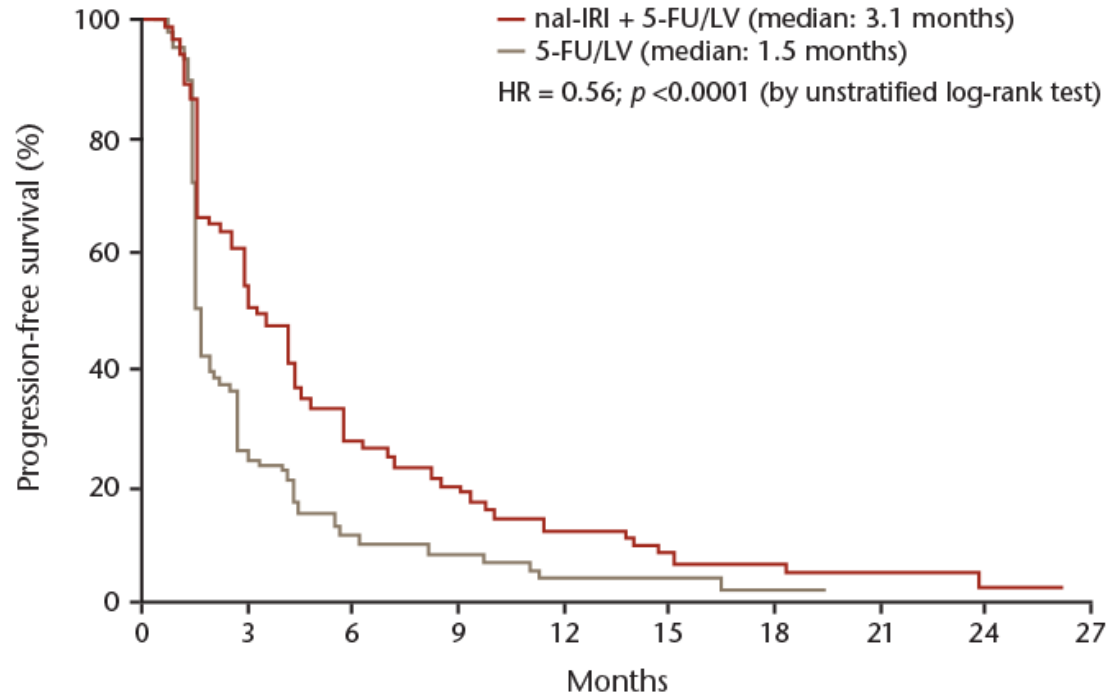
47j Patientin, Gymnasiallehrerin

- metastas. Colon-CA (ED 03/2016).
 - nach OP Progress auf 2nd line CTX
 - massive Nebenwirkungen (PNP, Schmerzen)
 - individueller Heilversuch („off label“) mit Pembrolizumab seit 04/2017
 - Gutes Ansprechen, keine Nebenwirkungen
- Patient möchte nach Onkolog. Reha wieder ihre Lehrtätigkeit aufnehmen...



Therapie des Pankreas-CAs

Neuzulassung nab-Irinotecan



Number at risk		0	3	6	9	12	15	18	21	24	27
nab-IRI + 5-FU/LV	117	50	26	17	10	5	4	2	1		
5-FU/LV	119	23	10	6	3	3	1	0	0		

5-FU/LV = 5-fluorouracil and leucovorin; HR = hazard ratio; nab-IRI = nanoliposomal irinotecan; PFS = progression-free survival

Therapie des Pankreas-CAs

Einsatz von nab-Paclitaxel

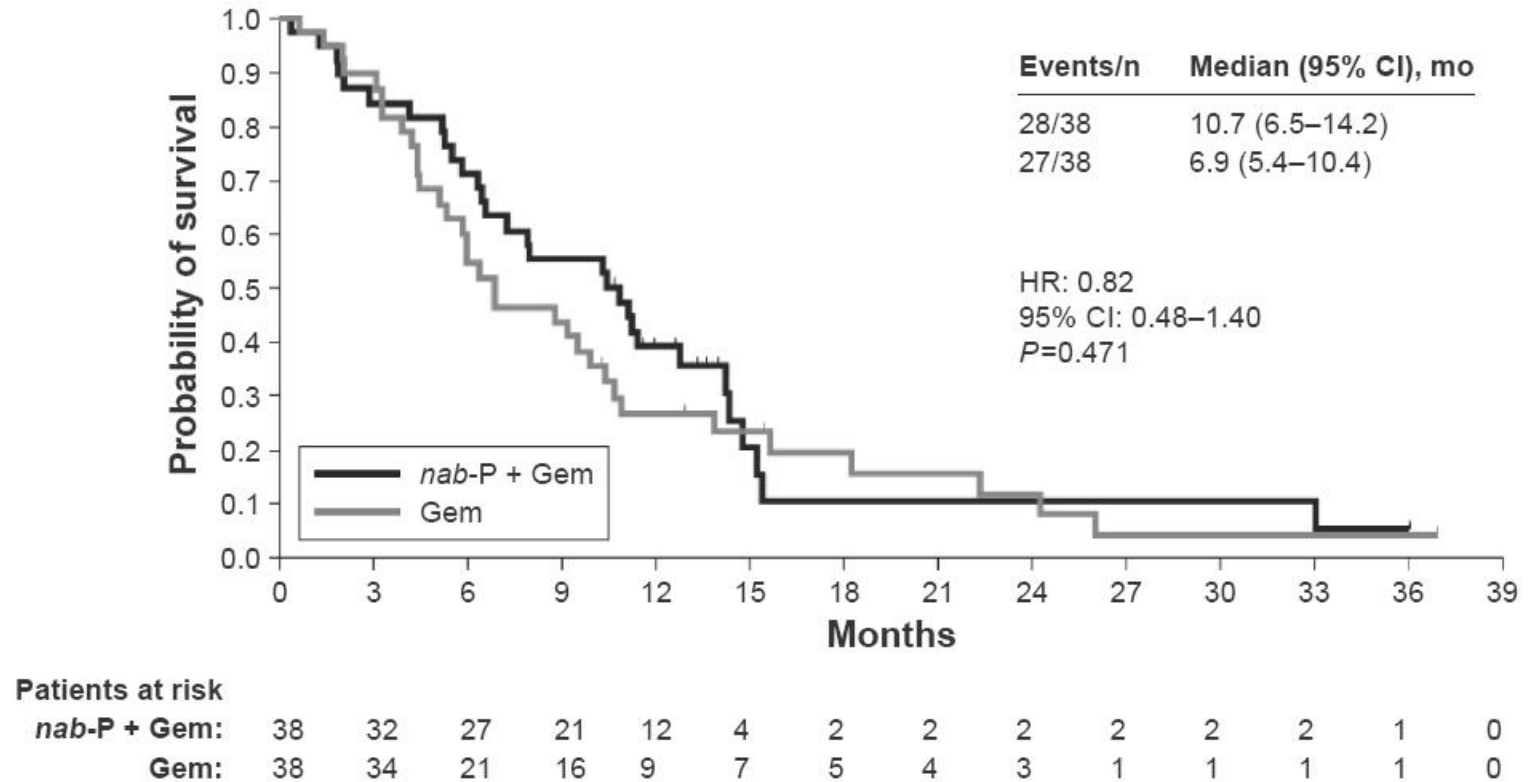


Figure I Overall survival in the Western European cohort.

Abbreviations: CI, confidence interval; Gem, gemcitabine; HR, hazard ratio; mo, month; nab-P, nab-paclitaxel.

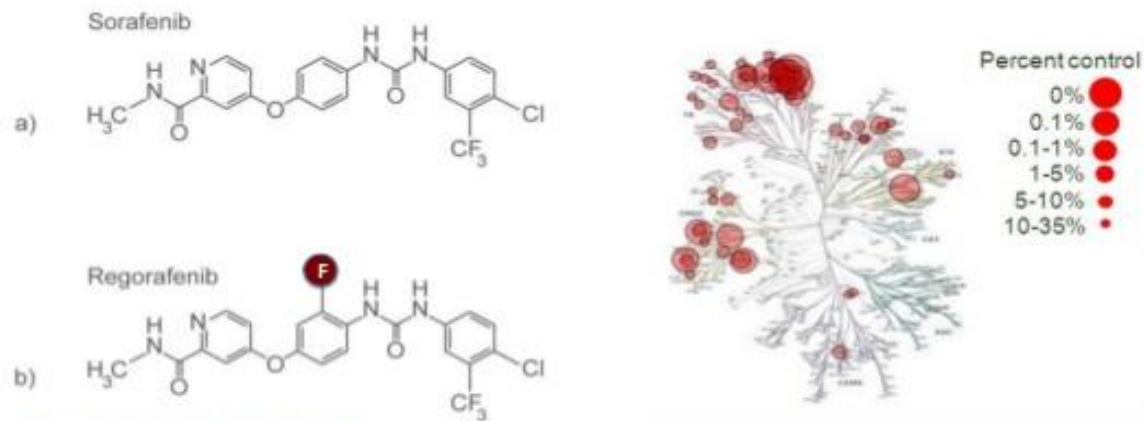
Aktuelle Therapie-Optionen:

- Gemzitabin -/+ Erlotinib
- nab-Paclitaxel + Gemzitabin
- nab-Irinotecan + 5-FU
- FOLFIRINOX
- (FoFOx, Folfri, 5-FU, Capezitabin, etc.)

Palliative Systemtherapie des HCCs

Regorafenib (Zulassung Herbst 2017)

Regorafenib a Mutikinase Inhibitor



phase III RESORCE trial

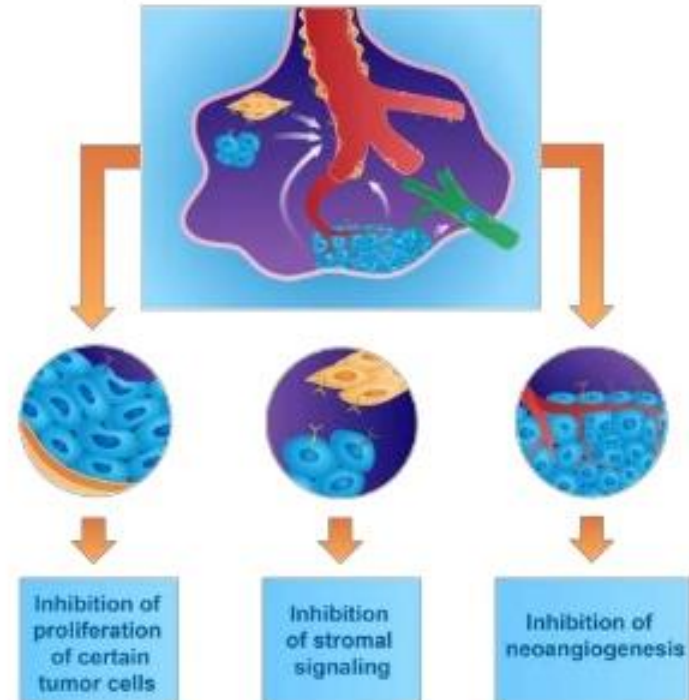


Palliative Systemtherapie des HCCs

Regorafenib (Zulassung Herbst 2017)

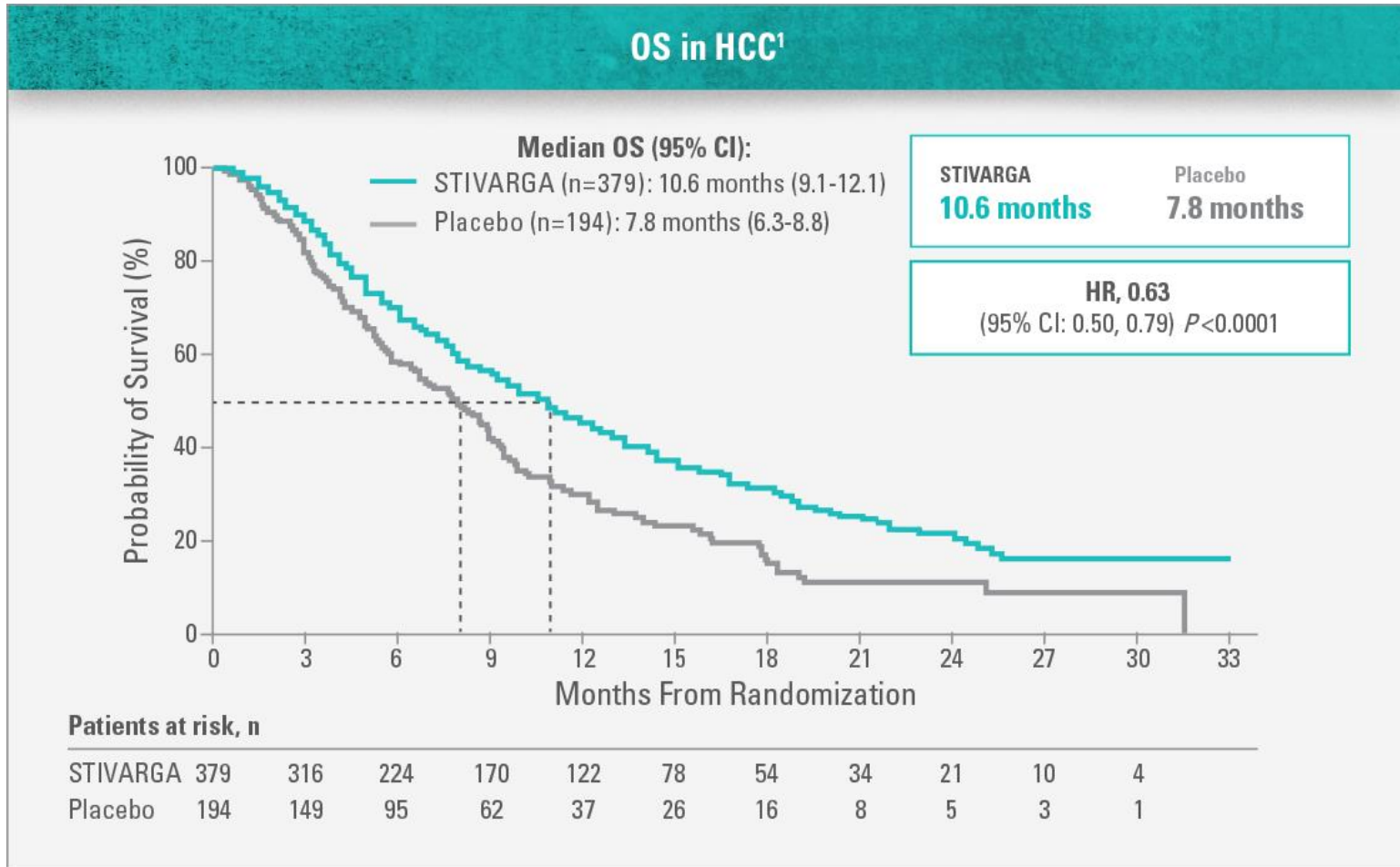
Mode of Action of Regorafenib

- Regorafenib inhibits multiple cell-signaling kinases:
 - Angiogenic
 - VEGFR1–3, TIE2
 - Stromal
 - PDGFR- β , FGFR
 - Oncogenic
 - KIT, PDGFR, RET
- $T_{1/2}$ in man: approx. 26-28 hrs
 - Two major metabolites (M2, M5) are pharmacologically active



Palliative Systemtherapie des HCCs

Regorafenib (Zulassung Herbst 2017)



Palliative Systemtherapie des HCCs

Lenvatinib

A Phase 3 Trial of Lenvatinib vs Sorafenib in First-line Treatment of Patients With Unresectable Hepatocellular Carcinoma (REFLECT Study)

Ann-Lii Cheng,¹ Richard S. Finn,² Shukui Qin,³ Kwang-Hyub Han,⁴ Kenji Ikeda,⁵ Fabio Piscaglia,⁶ Ari Baron,⁷ Joong-Won Park,⁸ Guohong Han,⁹ Jacek Jassem,¹⁰ Jean Frederic Blanc,¹¹ Arndt Vogel,¹² Dmitry Komov,¹³ TR Jeffrey Evans,¹⁴ Carlos Lopez,¹⁵ Corina Dutcus,¹⁶ Min Ren,¹⁶ Silvija Kraljevic,¹⁷ Toshiyuki Tamai,¹⁶ Masatoshi Kudo¹⁸

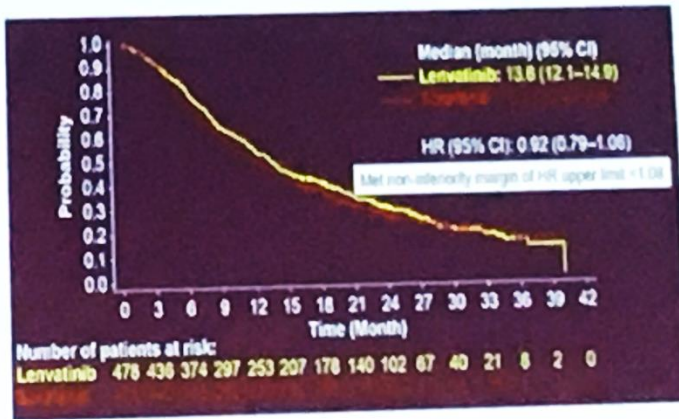
Patients with unresectable HCC (N = 954)
No prior systemic therapy for unresectable HCC; Child-Pugh A, ECOG PS ≤ 1

Lenvatinib (n = 478)
8 mg (BW < 60 kg) or 12 mg (BW ≥ 60 kg) once daily
Sorafenib (n = 476)
400 mg twice daily

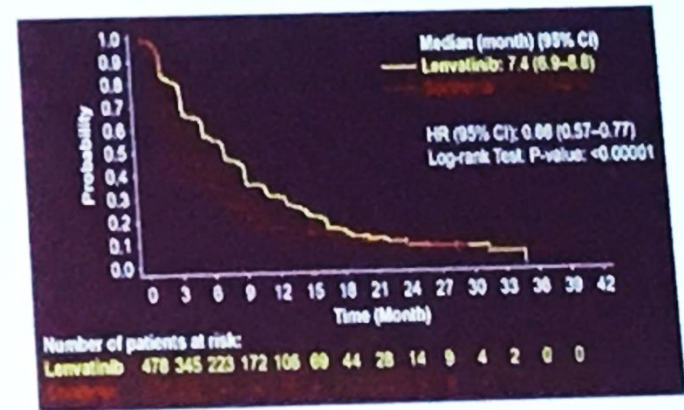
Palliative Systemtherapie des HCCs

Lenvatinib

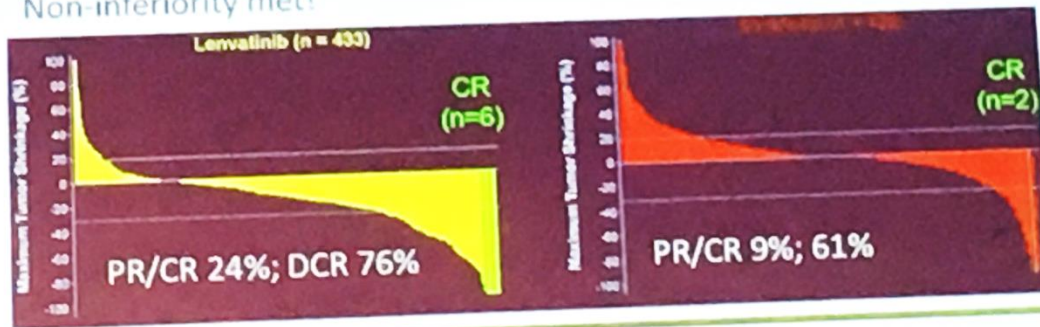
Lenvantinib vs. Sorafenib in HCC



Primary Endpoint OS: HR 0.92;
Non-inferiority met!



Secondary Endpoint PFS: HR 0.66; p<0.00001



Treatment related serious SAE: Len. 18 vs. Sor. 10%

Palliative Systemtherapie des HCCs

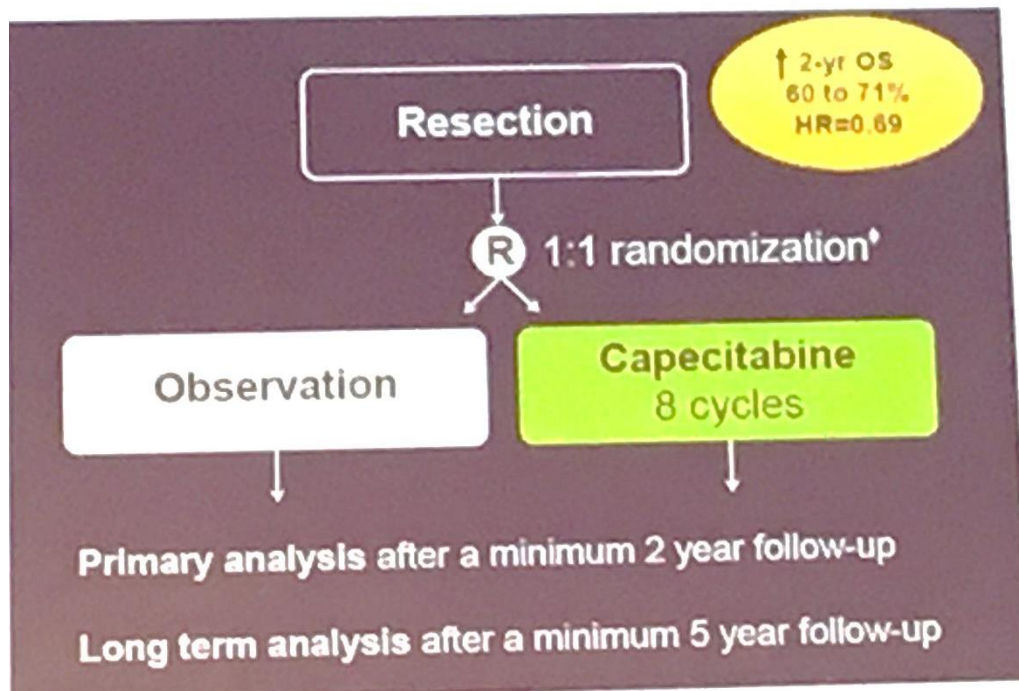
Lenvatinib

Lenvatinib vs. Sorafenib in HCC

- Lenvatinib has demonstrated noninferiority versus sorafenib in overall survival as first line systemic therapy and represents an alternative first line option in advanced HCC.
- Lenvatinib demonstrates statistically significant improvement in PFS, TTP, and ORR versus sorafenib in this population
- Acceptable safety profiles of lenvatinib, although slightly higher grade 3 AEs and treatment related SAEs (L:18% vs S:10%). Less hand foot syndrome, more hypertension noted

Adjuvante Therapie von Gallenwegstumoren

Adjuvant capecitabine for biliary tract cancer: The BILCAP randomized study

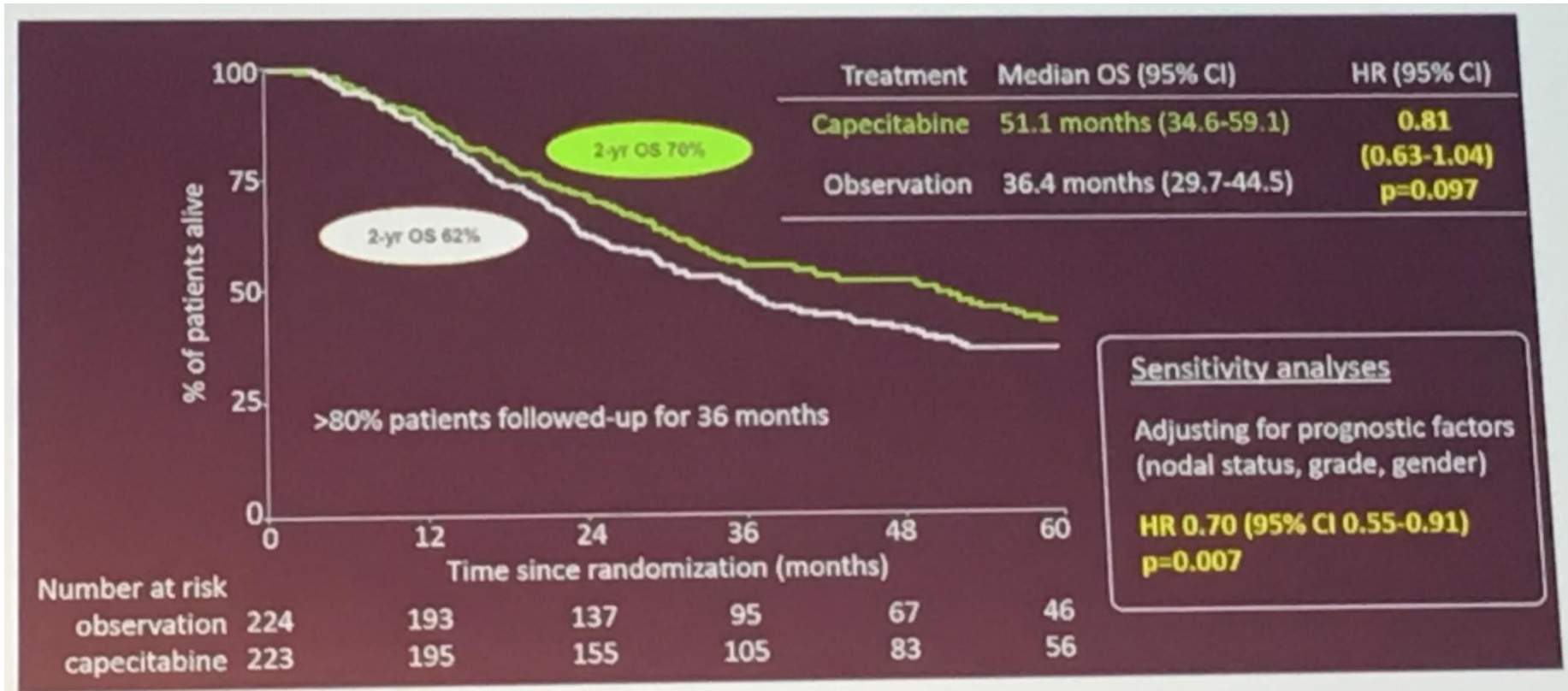


Capecitabine (1250mg/m²) twice a day on day 1 to 14 of a 3 weekly cycle for 24 weeks (8 cycles)

Intrahepatic cholangiocarcinoma (CC), Hilar CC, Muscle invasive gallbladder cancer, Lower common bile duct CC

- Radical & macroscopically complete surgery
- ECOG 0-2

Adjuvante Therapie von Gallenwegstumoren



Adjuvante Therapie von Gallenwegstumoren

	BILCAP			PRODIGE		
	Capecitabine N=223	Observation N=224	p	GEMOX N=94	Observation N=99	p
Median RFS	24.6 mo	17.6 mo	0.039	30.4 mo	22 mo	0.31
Median OS	51.1 mo	36.4 mo	0.097	Not available	Not available	

Adjuvant Capecitabine improved median OS by 15 months in resected biliary tract cancers and should become the standard of care: Clinically meaningful, acceptable toxicity profile.

Perioperative Therapie des Magen-CAs

Perioperative chemotherapy with docetaxel, oxaliplatin, and fluorouracil/leucovorin (FLOT) versus epirubicin, cisplatin, and fluorouracil or capecitabine (ECF/ECX) for resectable gastric or gastroesophageal junction (GEJ) adenocarcinoma (FLOT4): A multicenter, randomized phase 3 trial

Al-Batran SE, Homann N, Schmalenberg H, Kopp HG, Haag GM, Luley KB, Schmiegel WH, Folprecht G, Probst S, Prasnikar N, Thuss-Patience P, Fischbach W, Trojan J, Koenigsmann M, Pauligk C, Goetze TO, Jaeger E, Lindig U, Kasper S, Hozaeel W, Meiler J, Schuler MH, Hofheinz RD for the German Gastric Study Group at AIO

Perioperative Therapie des Magen-CAs

Perioperative FLOT in Gastric Cancer

FLOT4 Study Design

Randomized, multicenter, investigator-initiated, phase II/III study

- Gastric cancer or adenocarcinoma of the gastro-esophageal junction type I-III
- Medically and technically operable
- cT2-4/cN-any/cM0 or cT-any/cN+/cM0

S
T
R
A
T
I
F
I
C
A
T
I
O
N

R

n=716

FLOT x4 - RESECTION - FLOT x4

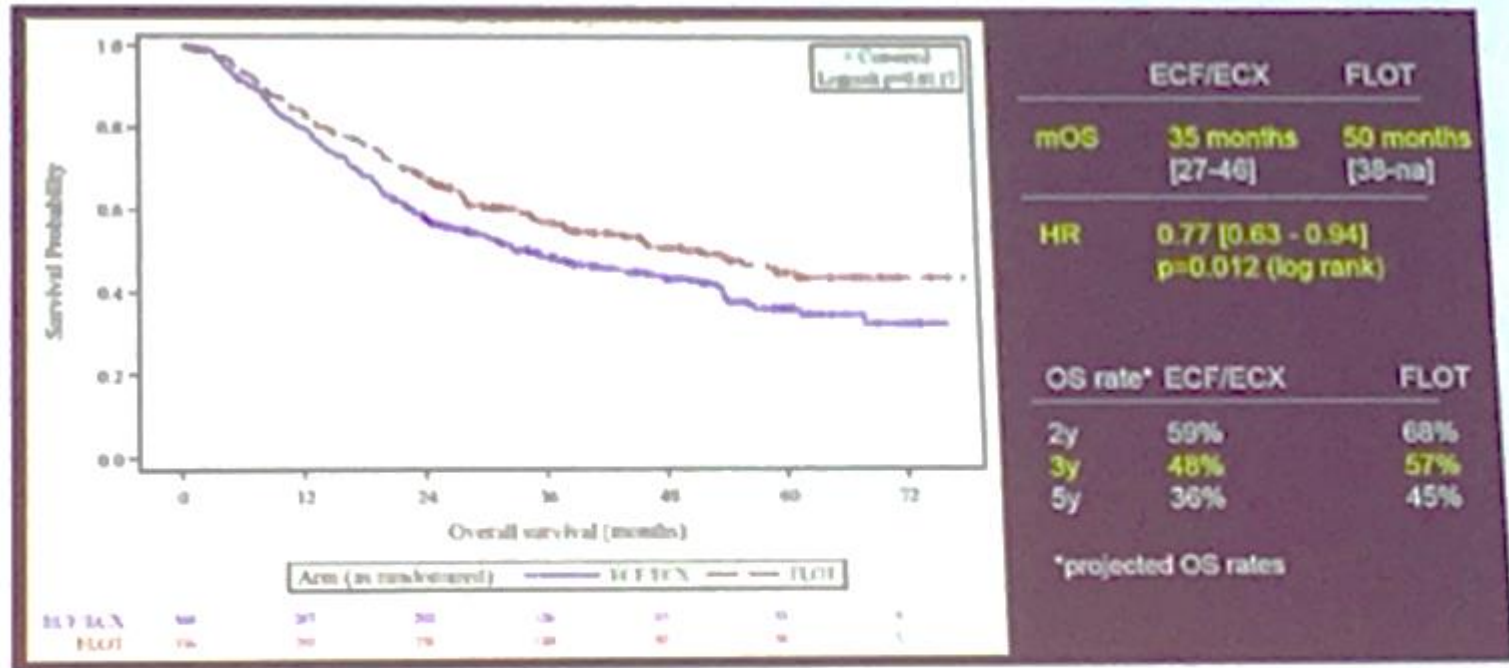
FLOT: docetaxel 50mg/m², d1; 5-FU 2800 mg/m², d1; leucovorin 200 mg/m², d1; oxaliplatin 85 mg/m², d1, every two weeks

ECF/ECX x3 - RESECTION - ECF/ECX x3

ECF/ECX: Epirubicin 50 mg/m², d1; cisplatin 60 mg/m², d1; 5-FU 200 mg/m² (or capecitabine 1250 mg/m² p.o. divided into two doses d1-d21), every three weeks

Stratification: ECOG (0 or 1 vs. 2), location of primary (GEJ type I vs. type II/III vs. stomach), age (< 60 vs. 60-69 vs. ≥70 years) and nodal status (cN+ vs. cN-).

Perioperative Therapie des Magen-CAs



- FLOT increases rates of curative surgery and prolonged PFS and OS as compared to ECF/ECX
- Toxicity was manageable ; no increase in surgical morbidity and mortality
- Perioperative FLOT should replace ECX/ECF , complete neoadjuvant application

Zusammenfassung

- **Zukünftig „individuelle“ adjuvante Therapiedauer beim KRK**
- **„target therapy“ des mKRK in Erprobung (TKI/Checkpoint-Inhibitoren) sowie Einsatz in Abhängigkeit von TU-Lokalisation**
- **Neue Therapieoptionen beim Pankreas-CA**
- **Erstmals seit 15 Jahren dokumentierter Fortschritt in der systemischen Therapie des HCCs**
- **Adjuvante Therapie von Gallenwegstumoren als Therapie-Standard etabliert**
- **FLOT neuer Therapie-Standard bei der perioperativen Therapie von Magenkarzinomen**

Vielen Dank für Ihre Aufmerksamkeit !



Fragen

