UCCH Pathway

UCCH Guideline
Hepatocellular Carcinoma

2.03.01 Anlage 37

Version Feb/2022

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Ein Kompetenznetzwerk des UKE

Guideline Hepatocellular Carcinoma

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according to TNM classification 8th edition

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Legend of Colours

= Therapeutic procedure

= Clinical or diagnostical condition

= Diagnostic procedure

= Clinical trial

= Supportive measure

= Referral

= Tumorboard (including post tumorboard interaction with patient that follows the principles of shared decision-making)

= Transplantboard

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Pathway: Hepatocellular Carcinoma

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Work up

- History
- Physical examination
- Clinical evaluation[1] with respect to
  - Liver function (Child-Pugh, MELD, ALBI)
  - Gastroesophageal varices
  - Performance status (ECOG)
- Laboratory examinations (liver function, HBV and HCV serology, AFP)
- One contrast enhanced imaging study (ultrasound, CT or MRI)
- In case of possible curative therapy (resection, ablation or transplantation):
  - Contrast enhanced liver MRI (or CT)
  - Contrast enhanced CT of the chest

Supportive:

- Offer contact to self help group
- Offer psychooncological support

TB

In patients without liver cirrhosis or inconclusive imaging, : -> biopsy will be discussed in the TB.[2]

No liver cirrhosis → Pathway page 2

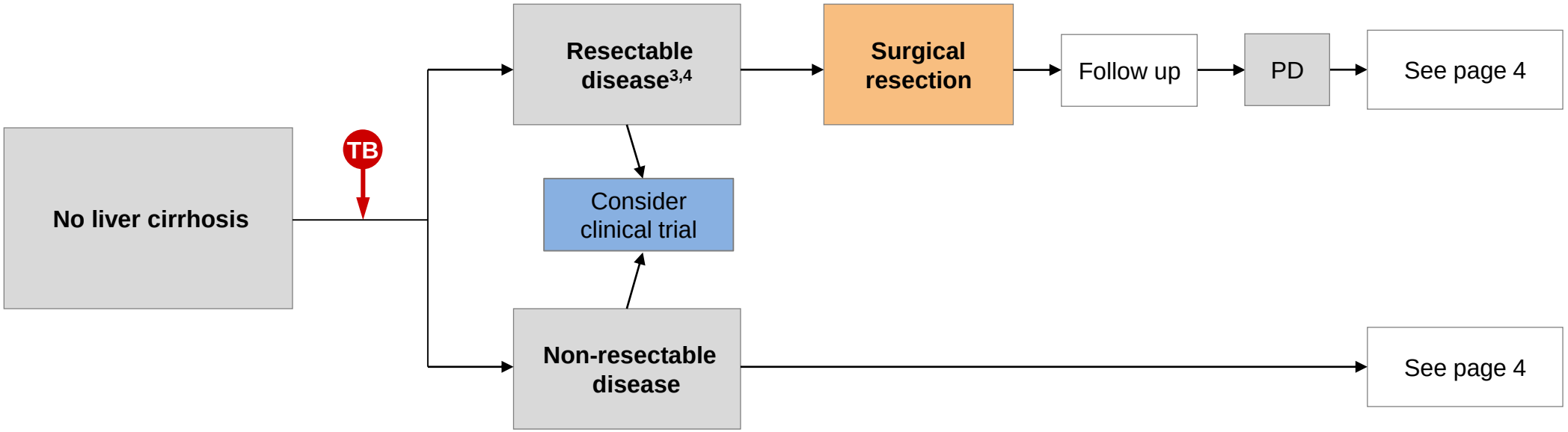
Liver cirrhosis, transplantable → Pathway page 3

Liver cirrhosis, non-transplantable → Pathway page 4

[1] See HCC screening on page 6.

[2] Histological confirmation including histopathological subtyping is required in all radiological unclear findings, in patients without proven cirrhosis, and in incurable disease (particularly with regard to clinical trials).

Pathway page 2: No liver cirrhosis

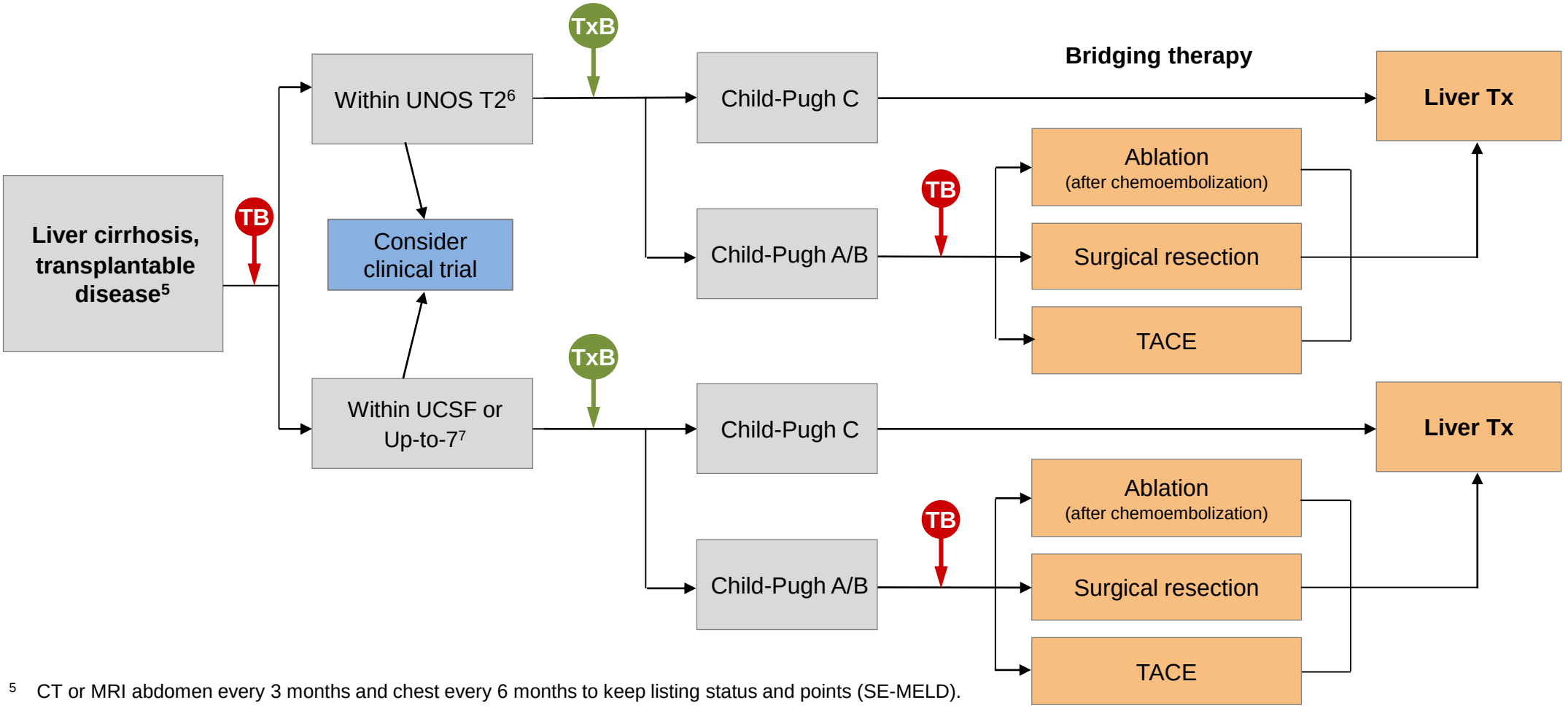


PD Progressive disease

3 Lesion(s) locally resectable, patient in good condition for surgery, without irresectable extrahepatic tumor manifestation, without tumor invasion into big hepatic vessels. Sufficiant liver funktion.

4 Concomitant therapy of chronic HBV/HCV-infection.

Pathway page 3: Liver cirrhosis, transplantable

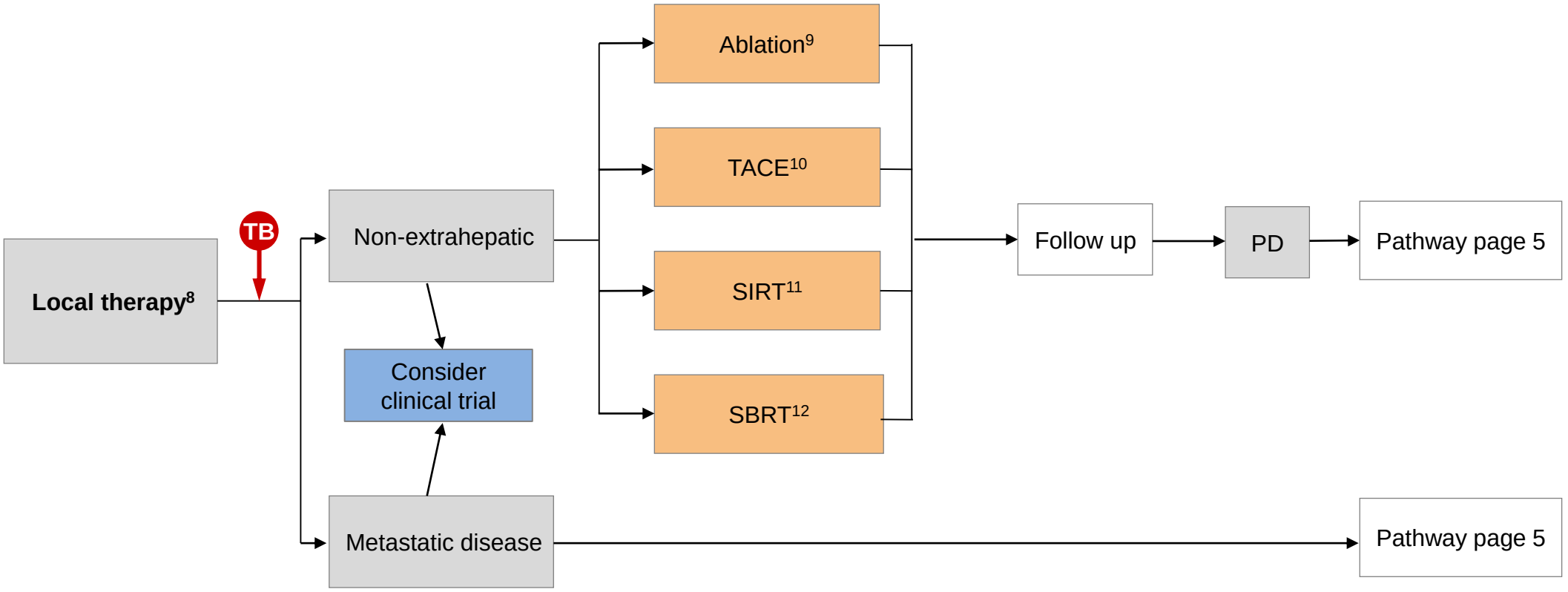


5 CT or MRI abdomen every 3 months and chest every 6 months to keep listing status and points (SE-MELD).

6 Liver Tx according to UNOS T2 with exceptional MELD (SE-MELD):
- 1x 2-5 cm or 2-3x 1-3 cm.
- no extrahepatic involvement, no major vessel involvement, no extrahepatic metastasis.

7 Apart from UNOS T2 criteria transplantation only exceptional if tumor within UCSF (University of California San Francisco) criteria (1 lesion not larger than 6.5 cm, or less than 3 lesions with diameters <4.5 cm, maximum sum of tumor diameters <8 cm) or Up-to 7 criteria (diameter of largest nodule in cm plus number of nodules).

Pathway page 4: Local therapy



8 Tumor not resectable and/or patient is not in acceptable condition for surgery (comorbidity), impaired liver function.

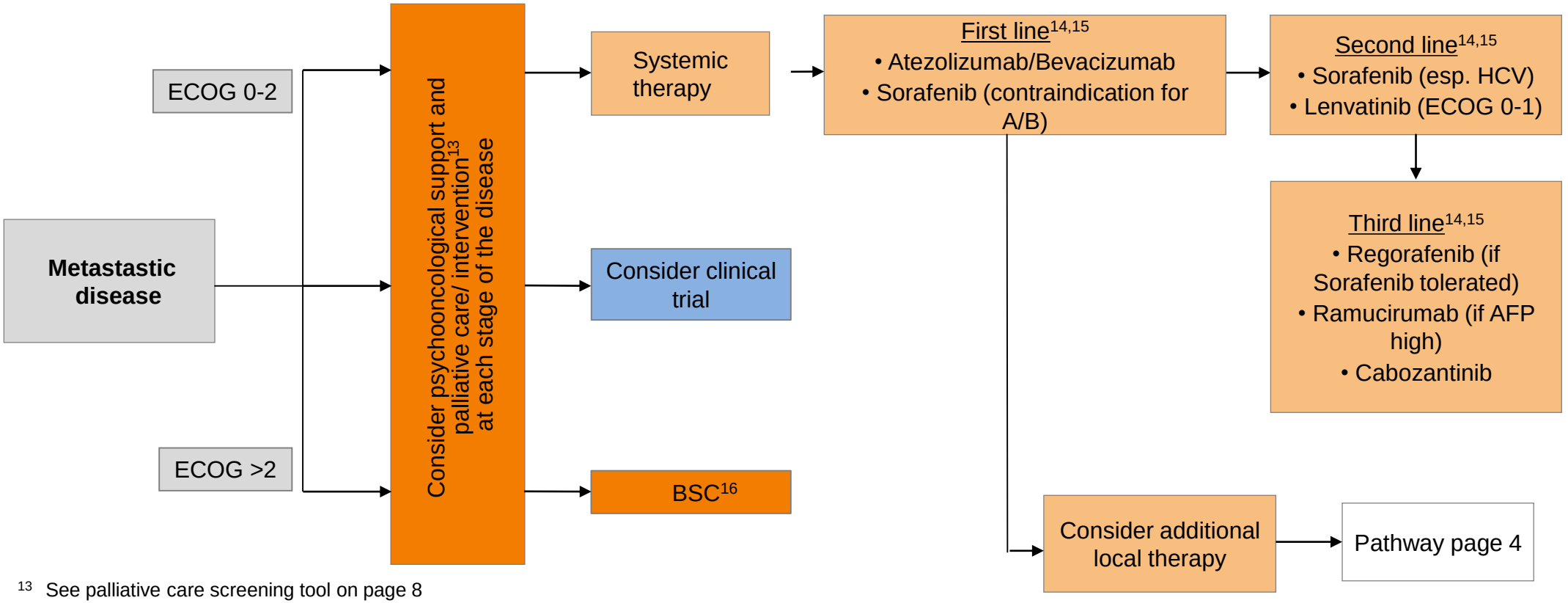
9 Consider pre-ablation chemoembolization in lesions >3 cm or to guide ablation.

10 TACE (transarterial chemoembolization) for solitary or multilocular HCC, with cisplatin or doxorubicine, repetition every 2-3 months depending on the findings in imaging. Contraindications for TACE: Child-Pugh C, complete portal vein thrombosis, metastatic disease or tumorinfiltration >75% of the liver, refractory ascites.

11 SIRT (selective internal radiotherapy) only in indivudual cases, e.g. large primary tumor, portal vein thrombosis, or diffuse hepatic involvement.

12 SBRT only in individual cases.

Pathway page 5: Metastatic disease



[13] See palliative care screening tool on page 8

[14] In metastatic disease or locoregional not otherwise treatable with the following criteria:
- Child-Pugh A/B
- ECOG 0-2
- Life expectancy >3 months

[15] See palliative care screening tool on page 8.

[16] BSC includes:
- Nutritional support to prevent malnutrition (dietary supplements, PEG)
- Treatment of pruritus according to AWMF-2-K guideline
- Sports and physical exercise therapy
- Psychological counseling
- Therapy of esophageal varices and ascites

Page 6: Hepatocellular Screening programme

Hepatocellular screening programme

Every 6 months in patients with liver cirrhosis, chronic active hepatitis B, hepatitis C with advanced fibrosis, histological confirmed NASH hepatitis

- Clinical presentation
- Lab exam (optionally including AFP)
- Ultrasound liver
    - Hepatic nodules <10 mm: Repeat follow up in 3 months
    - Hepatic nodules >10 mm: Confirmational contrast-enhanced imaging (ultrasound, CT or MRI) and additional work up (See pathway page 1)

Page 7: Follow up

- Offer contact to psychooncology and/or self help group whenever necessary

1.) After liver transplantation:

- According to Standard operation procedure of the UTC

2.) After surgical treatment:

Every 3 months for 2 years, afterwards every 6 months according to hepatocellular screening programme (page 6)

- Clinical presentation
- Laboratory exam
- Contrast enhanced CT or MRI
- Chest imaging if clinically indicated or every 6 months

3.) After local treatment:

8-12 weeks after TACE or ablation, then every 3 months for at least 2 years, afterwards every 6 months according to hepatocellular screening programme (page 6)

- Clinical presentation
- Laboratory exam
- Contrast enhanced CT or MRI

4.) Metastatic disease / Systemic treatment:

Every 3 months or if clinically indicated

- Clinical presentation
- Laboratory exam including AFP if initially elevated
- Abdominal imaging
- Chest imaging (only in patients with chest lesions, otherwise every 6 months)

Page 8: Palliative care screening tool

Screening items			Points
1.	• Presence of metastatic or locally advanced cancer		**2**
2.	• ECOG score (functional status score, performance status)		**0-4**
3.	• Presence of one or more serious complications of advanced cancer usually associated with a prognosis of < 12 months (e.g. brain metastases, hypercalcemia, delirium, spinal cord compression, cachexia)		**1**
4.	• Presence of one or more serious comorbid diseases also associated with poor prognosis (e.g. moderate-severe COPD or CHF, dementia, AIDS, end stage renal failure end stage liver cirrhosis)		**1**
5.	• Presence of palliative care problems		**1**
	a.	• Symptoms uncontrolled by standard approaches	**1**
	b.	• Moderate to severe distress in patient or family, related to cancer diagnosis or therapy (personal targets and expectations, educational and informational requirements, cultural factors)	**1**
	c.	• Patient/family requests palliative care consult	**1**
	d.	• Team needs assistance with complex decision making or determing goals of care (benefit/side effects of treatment)	**1**
	e.	• Instable or deficient network especially for emergency situation or 24-h care	**1**

A total of > 5 points signalizes need for supportive palliative care

According to Glare et al. (2011); NCCN Clinical Practice guidelines in Oncology 2015