What drives long term survival with systemic treatment
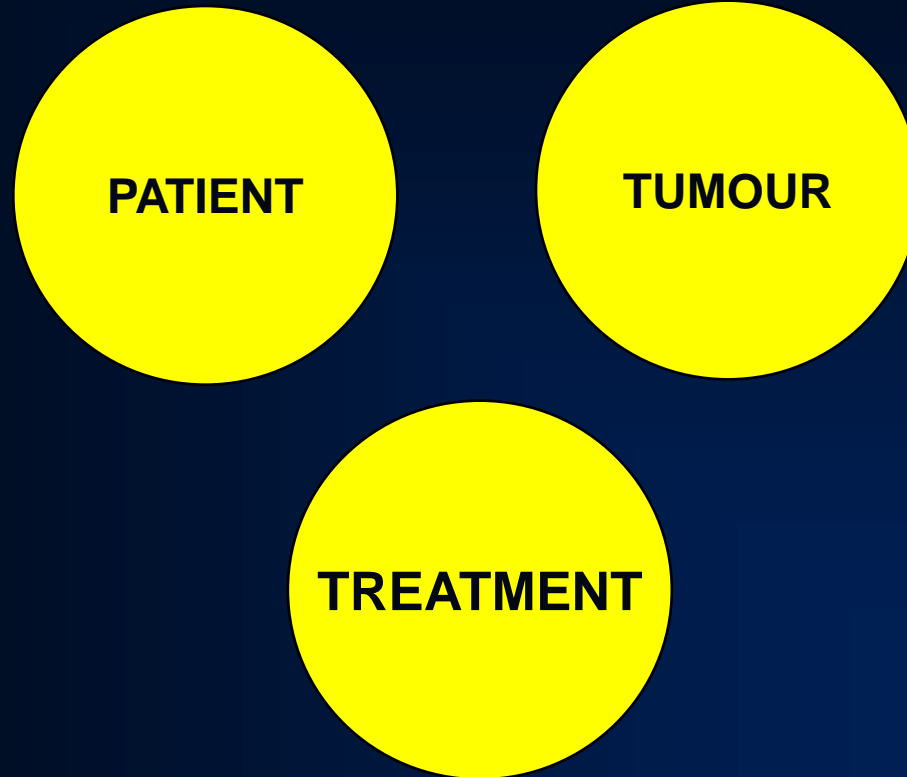
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determinants of efficacy

PATIENT

TUMOUR

TREATMENT

What drives long term survival of mCRC

1. **Relevance of pts and tumour related factors on outcome**

2. **Relevance of treatment on outcome**
   - **The 4 different eras**
   - **Impact of each individual drug**
   - **How treatment can change the biology (i.e. tumor related factors)**
   - **Clinical case**

3. **Median vs outlyers**

Relevance of pts and tumour related factors on outcome

1. Koehne (Ann Oncol 1992) : when median OS was 11 months
    - Poor   6   mo
    - Intermediate   10 mo
    - Good   14 mo

2. Chibaudel (The Oncol 2011) : when median OS was 22 months
    - Poor   14 mo
    - Intermediate   21 mo
    - Good   27 mo

3. Now (ESMO 2014) : median OS 30+ months

Relevance of pts and tumour related factors on outcome

1. **Koehne (Ann Oncol 1992) : when median OS was 11 months**
   - Poor   6 mo
   - Intermediate   10 mo   100%
   - Good   14 mo

2. **Chibaudel (The Oncol 2011) : when median OS was 22 months**
   - Poor   14 mo
   - Intermediate   21 mo   100%
   - Good   27 mo

3. **Now (ESMO 2014) : median OS 30+ months**

                                      likely 100%

Relevance of treatment on outcome: the 4 different eras

era	treatment	MST	gain vs no Rx	proportional gain
'1970'	None	6	0	0
'1990	FU	12	6	100%
' 2000	doublets	20	14	240%
' now'	biologics	30	24	500%

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Toward the definition of the overall benefit of antineoplastic agents in advanced CRC

DRUG	1° line	other lines	'overall'
FU	6.0, 6.0, 2.2		5
IRI	2.0, 3.1, 3.2	2.7, 2.3	3
OXALI	1.5, 3.1, 4.5		3
BEV	4.7, 1.3, 3.7, 3.9, 4.9	2.5, 1.4	5
CET	3.5 ,4.3,-0.7,-0.7	0.7, 4.7	4
PANI	4.2	2.0, -0.1, 0.5	4
Extd RAS	1.5, 4.7, 3.8		4
AFLIB		1.4	1.4
REGO		1.4	1.4

# Toward the definition of the overall benefit of antineoplastic agents in advanced CRC

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Male 66, stage III T3 G2 N1 5/23, colon, in 2009, adjuvant folfox

Feb 2010
Fatigue, fever, PS 1-2 CEA 1250

FOLFIRI + beva
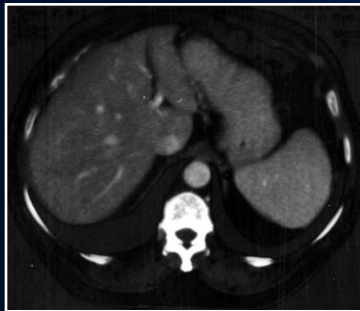
Aug 2010
Asymptomatic, CEA 12
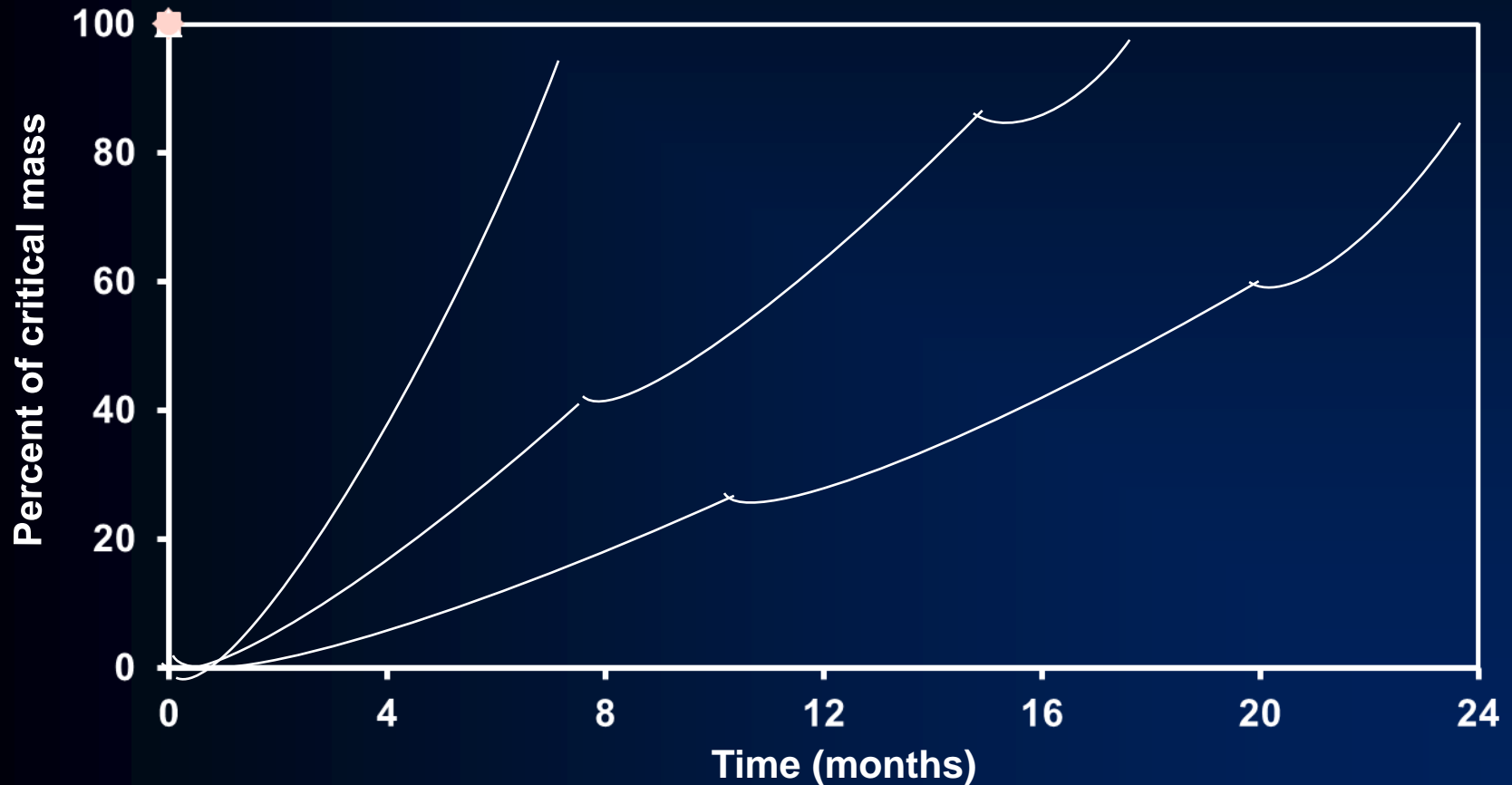**Cape +beva**

feb 2011
Asymptomatic, CEA 15 ng/mL

Cape +beva

66 yo, Excellent PR to FOLFIRI BEVA and maintenance with cape beva for 12 months

August	2012	pause for 4 months	
January	2013	P Liver + N	→ rechallenge FOLFIRI for 3 months → PR→pause
August	2013	P Liver+N+Lung	→ cape 4 months → SD , then pause 2 mo
Februar	2014	P	→ FOLFOX for 3 mo → minimal response
May	2014	MR	→ maintenance cape till now → SD

Changing the natural history

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