

# Management of cardiovascular drugs in advanced care planning: just drop it all?

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# To cover

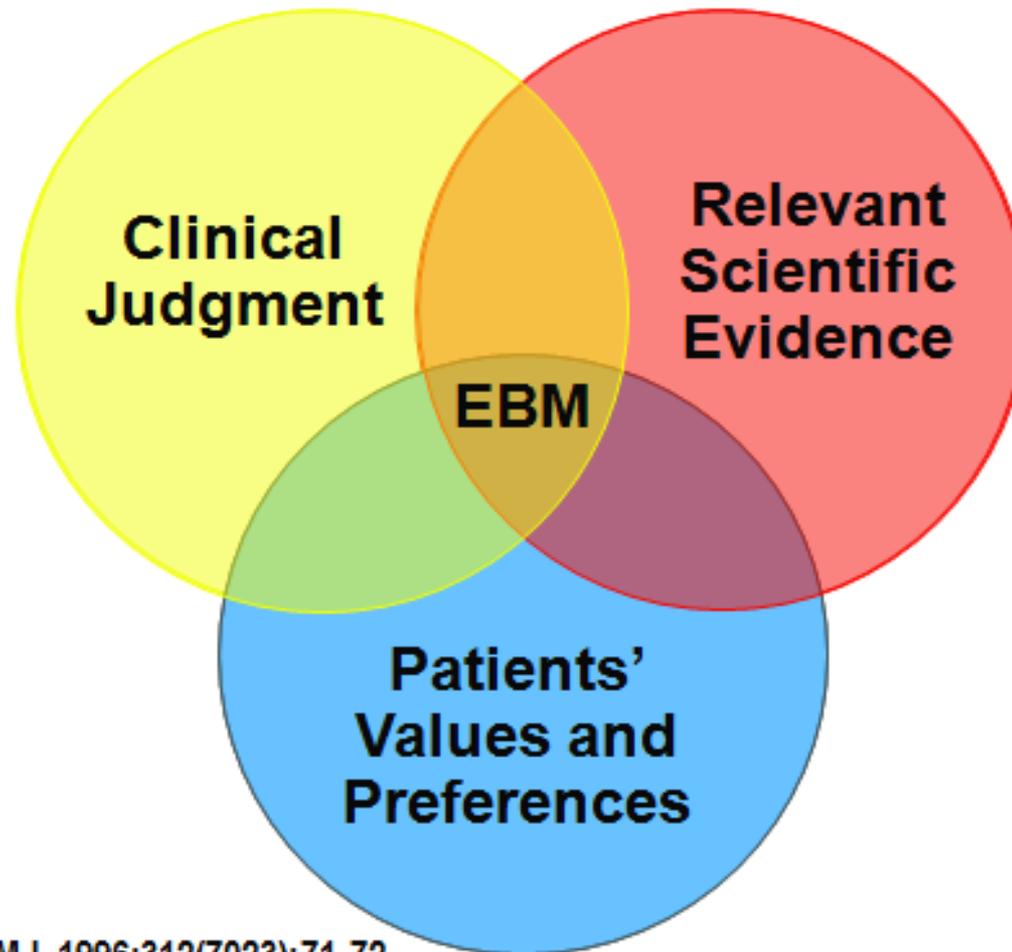
1. What is Advance Care Planning?
2. When is the right time?
3. ACP in cancer patients
4. ACP in cardiac patients
5. Principles of practice



## Systematic Review Meta analysis

Clinical guidelines are wonderful when there is evidence

# What Is Evidence-Based Medicine?



Sackett DL, et al. BMJ. 1996;312(7023):71-72.

# What is Advance Care Planning?

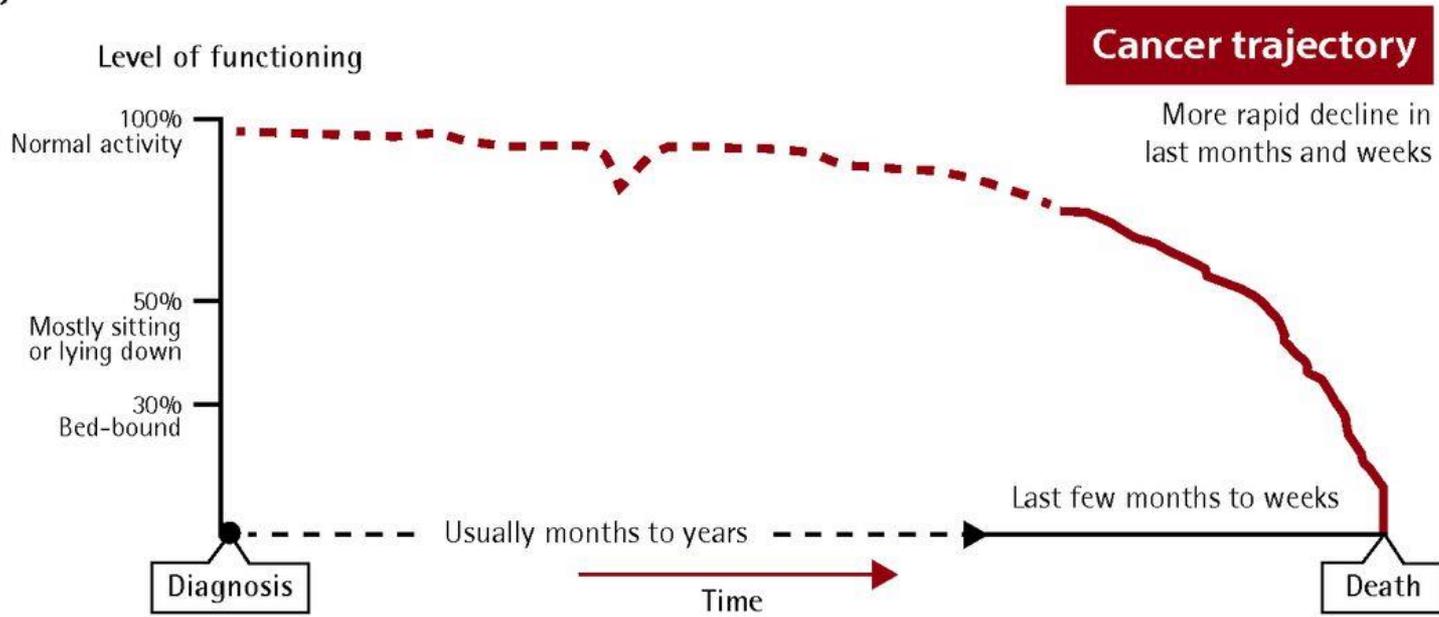
The conversation between people, their families and carers and those looking after them about their future wishes and priorities for care.

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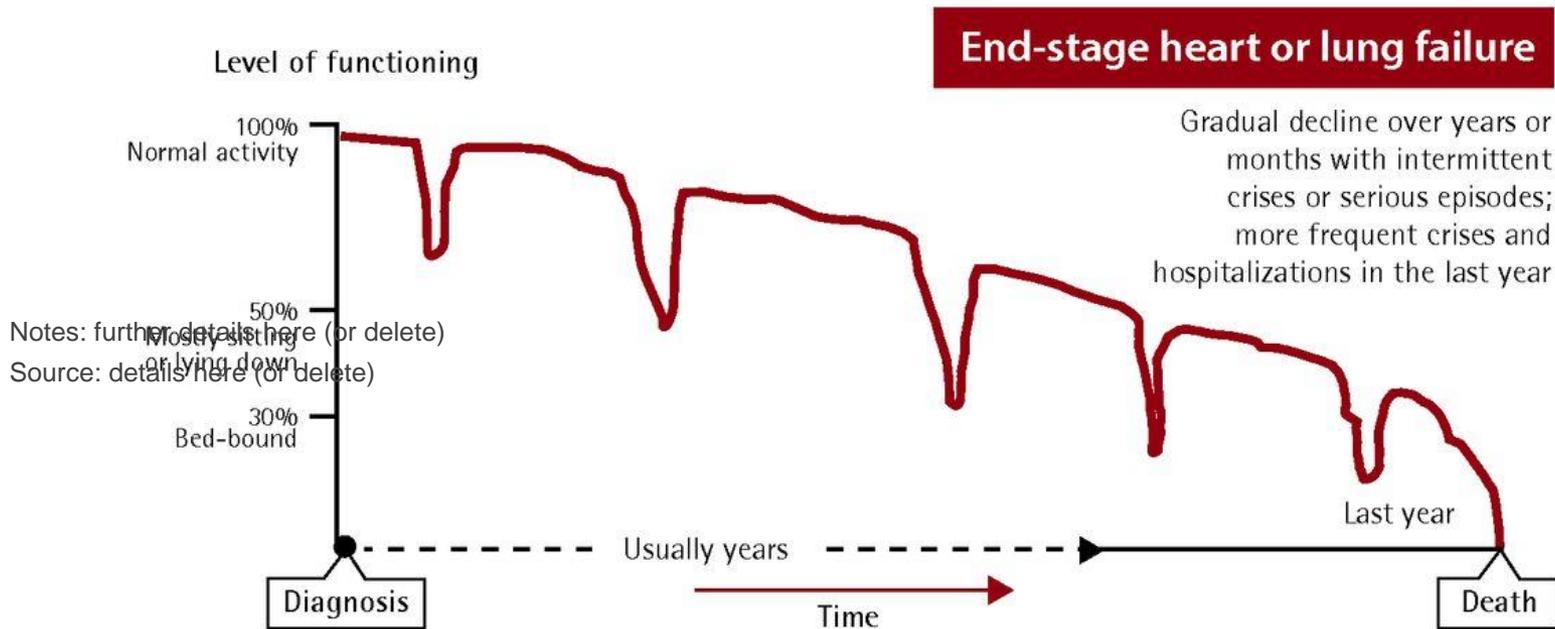
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When should this occur?

A)



B)



# Triggers for ACP

1. No further treatment available
2. Deterioration on maximal treatment
3. Repeated hospitalizations
4. The surprise question

“Would you be surprised if this patient died in the next 6-12 months?”

# What is Advance Care Planning?

The conversation between people, their families and carers and those looking after them about their future wishes and priorities for care.

- Escalation/ readmission plans
- Preferred place of end of life care
- Resuscitation status
- Rationalisation of medicines

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# What's the purpose of rationalizing medicines?

Reduced pill burden

Some may no longer be necessary

Some may no longer work

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# What drugs are no longer needed?

1. Hypertensives?
2. Statins
3. Diabetes drugs?

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# Are your drugs still being absorbed?



Normal small bowel



Congestive cardiac failure/  
Low albumin

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# Changes in advanced disease:

- Renal impairment
  - Digoxin
  - Opioids
- Hepatic impairment
  - B-blocker
- Hypoalbuminaemia
  - Highly protein bound drugs



**Rationalisation: avoid the scorched earth approach**



**NEED AN INDIVIDUALISED APPROACH**

# Caution with drugs that the body will miss if stopped suddenly

1. Steroids
2. Beta blockers
3. Anticonvulsants
4. Opioids
5. SSRIs

# Do RCTS represent the palliative care population?

Guidelines	Palliative care patient
<ul style="list-style-type: none"><li>• Population represented in clinical trials</li><li>• Data largely based on randomized control trials</li><li>• Primary outcomes focused on survival or morbidity</li><li>• Normal renal/ hepatic function</li><li>• Frequently receiving active treatments .</li></ul>	<ul style="list-style-type: none"><li>• Population not represented in clinical trials</li><li>• Focus on quality of life, symptom control.</li><li>• Less focus on prolongation of survival</li><li>• Deranged and worsening renal/ hepatic function</li><li>• Receiving supportive care medicines</li></ul>

# For each drug ask....

**What is its purpose?**

**Is it life prolonging**

**Is it controlling symptoms**

**Is it preventing symptoms**

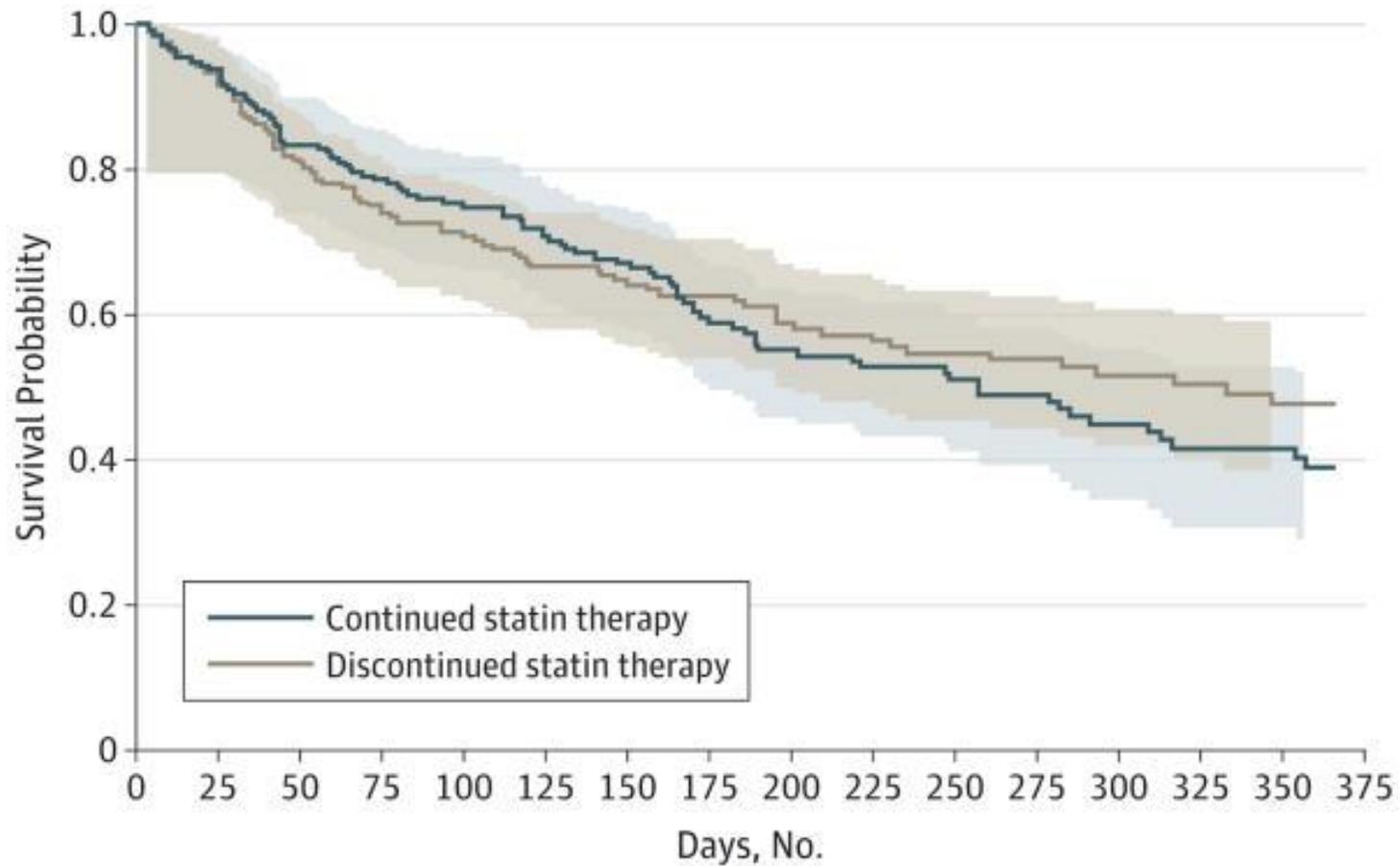
**What would happen if we stopped it?**

# Drugs to continue or consider stoppings

1. Anti-anginals: continue
2. Statins: stop
3. Antihypertensives: stop
4. Antidiabetics: re assess the need
5. Anticoagulants/ antiplatelets : read on...

# Stop statin study (Kutner et al JAMA 2015)

1. Advanced disease
  2. Life expectancy 1-12 months
  3. Statin for primary or secondary Tx
  4. No recent active cardiovascular disease
- 1:1 randomization to stop of continue statin



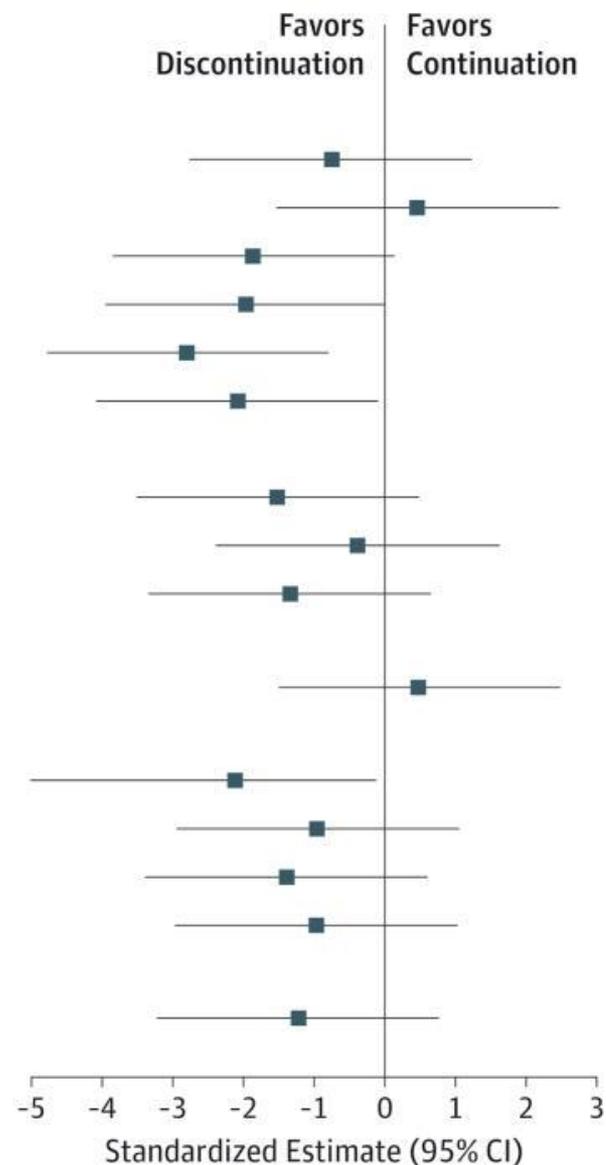
No. at risk

Continued statin therapy	192	149	105	64	47	32	21
Discontinued statin therapy	189	135	93	68	52	36	26

**Survival difference**



Domain Measure	Estimate (95% CI)
<b>Quality of life</b>	
Overall	0.18 (-0.28 to 0.64)
Physical	-0.08 (-0.43 to 0.26)
Psychological	0.39 (-0.02 to 0.80)
Well-being	0.32 (0.00 to 0.64)
Support	0.53 (0.16 to 0.90)
Total	0.26 (0.02 to 0.50)
<b>Symptoms</b>	
Standard items	-2.19 (-5.01 to 0.63)
Statin items	-0.23 (-1.39 to 0.93)
All items	-2.45 (-6.02 to 1.12)
<b>Performance status</b>	
AKPS scale score	-0.80 (-4.11 to 2.50)
<b>Medications</b>	
Total medications	-0.67 (-1.29 to -0.05)
Regular	-0.25 (-0.77 to 0.27)
PRN $\geq$ 1/2 d	-0.19 (-0.46 to 0.08)
PRN $<$ 1/2 d	-0.11 (-0.32 to 0.11)
<b>Satisfaction</b>	
Recommend care	0.08 (-0.05 to 0.20)



## Quality of life domains on stopping statins

27

# What is the purpose of anticoagulation?

General CAT population	Palliative care patient
<ul style="list-style-type: none"><li>• Treatment of symptoms</li><li>• Prevention of clot propagation and worsening of symptoms</li><li>• Prevention of further clot formation during SACT</li><li>• Prevention of early mortality</li><li>• Prevention/ reduction in PTS</li></ul>	<ul style="list-style-type: none"><li>• Treatment of symptoms</li></ul>

# When to stop

# RHESO study

- **22 SPCUs, 1199 patients**
- **CRB 9.8% (95% CI 8.3-11.6)**

Notes: further details here (or delete)

Source: details here (or delete)

# Characteristics of patients

<b>Reason for admission to the palliative unit</b>	
Cancer	1091 (91.0)
Metastatic cancer	929 (77.5)
Neurologic disease	52 (4.3)
Cardiac or respiratory disease	49 (4.1)
AIDS*	7 (0.6)
<b>Treatments received within 4 weeks prior to admission</b>	
<b>Cancer treatment</b>	
Chemotherapy	257 (21.4)
Targeted cancer therapy	35 (2.9)
Radiotherapy	91 (7.6)
Growth factors	32 (2.7)
<b>Anticoagulant therapy</b>	
At prophylactic (low) dose**	527 (44.0)
At therapeutic (high) dose††	69 (5.7)
Antiplatelet therapy	167 (14.0)
Corticosteroids	620 (52.0)
Antidepressive agents	304 (25.4)
Serotonin reuptake inhibitors	208 (17.3)

## Risk factors for bleeding

**Table 4** Univariate and multivariate analyses of potential risk factors for clinically relevant bleeding at 3 months

Patient factor	With bleeding ( <i>n</i> = 116)	Without bleeding ( <i>n</i> = 1075)	Multivariate analysis*	
			HR (95% CI)	<i>P</i> value
Male sex	63 (54.3)	479 (44.6)	1.31 (0.91–1.90)	0.15
Cancer	114 (98.3)	970 (90.2)	5.65 (1.40–22.9)	0.01
Previous surgery†	2 (1.7)	67 (6.2)	0.21 (0.05–0.87)	0.03
Previous bleeding‡	38 (32.8)	134 (12.5)	3.36 (2.28–4.97)	< 0.0001
Anticoagulant prophylaxis	69 (59.5)	561 (52.2)	1.48 (1.02–2.15)	0.04
Antiplatelet therapy‡	44 (37.9)	288 (26.9)	1.67 (1.15–2.44)	0.007

# Impact of anticoagulants

**Clinically relevant bleeding**

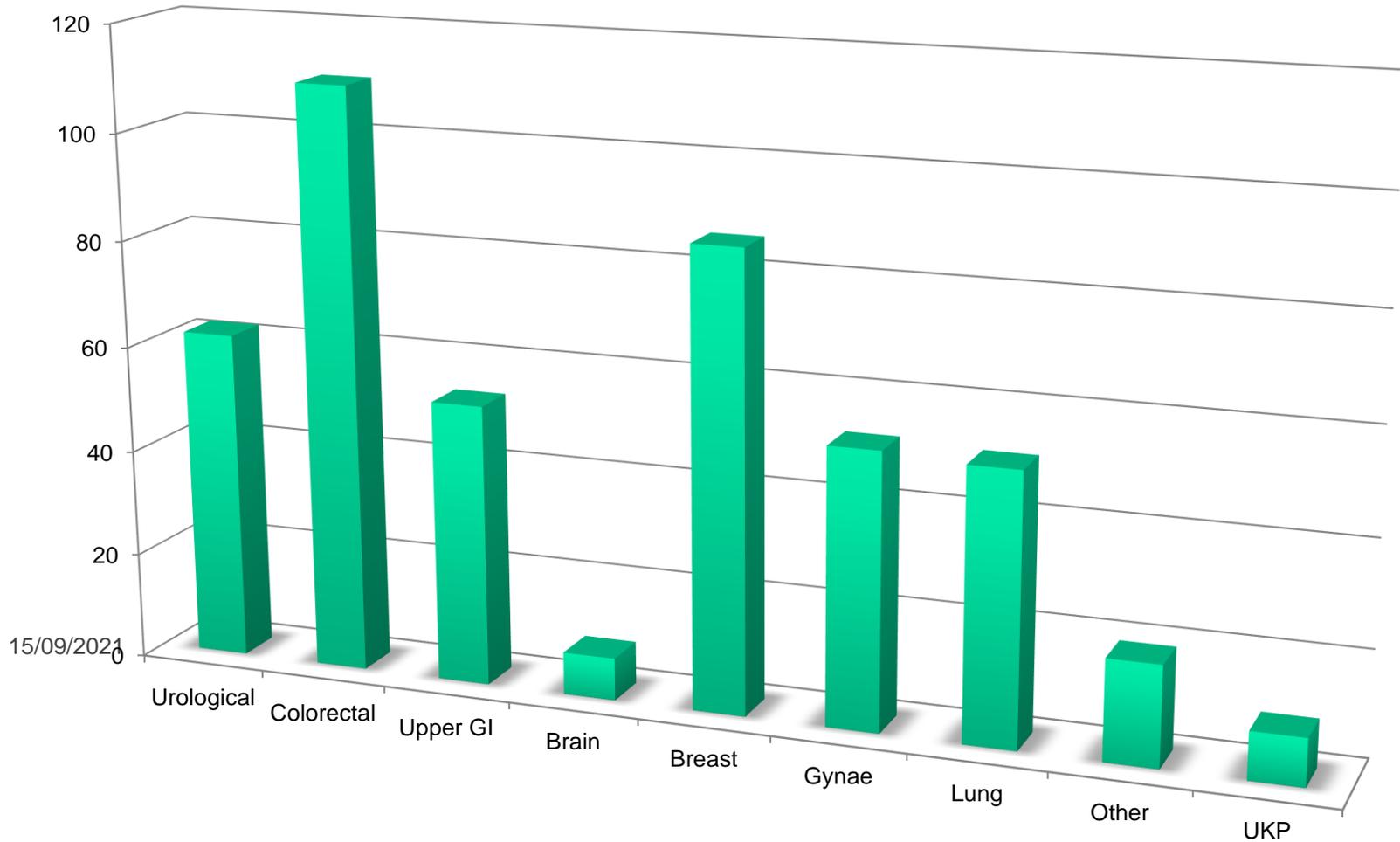
**11% (on anticoagulation) vs 8.4% (off anticoagulation)**

**Increased bleeding last week of life**

# Study to identify current practice in patients with cancer associated thrombosis at the end of life

- Setting: Patients attending a regional cancer associated thrombosis clinic
- Follow up over two years
- Notes review of patients at end of life
- Demographics, when anticoagulation stopped, bleeding/thrombotic complications,
- Place of death

# Cancer diagnoses: n=450

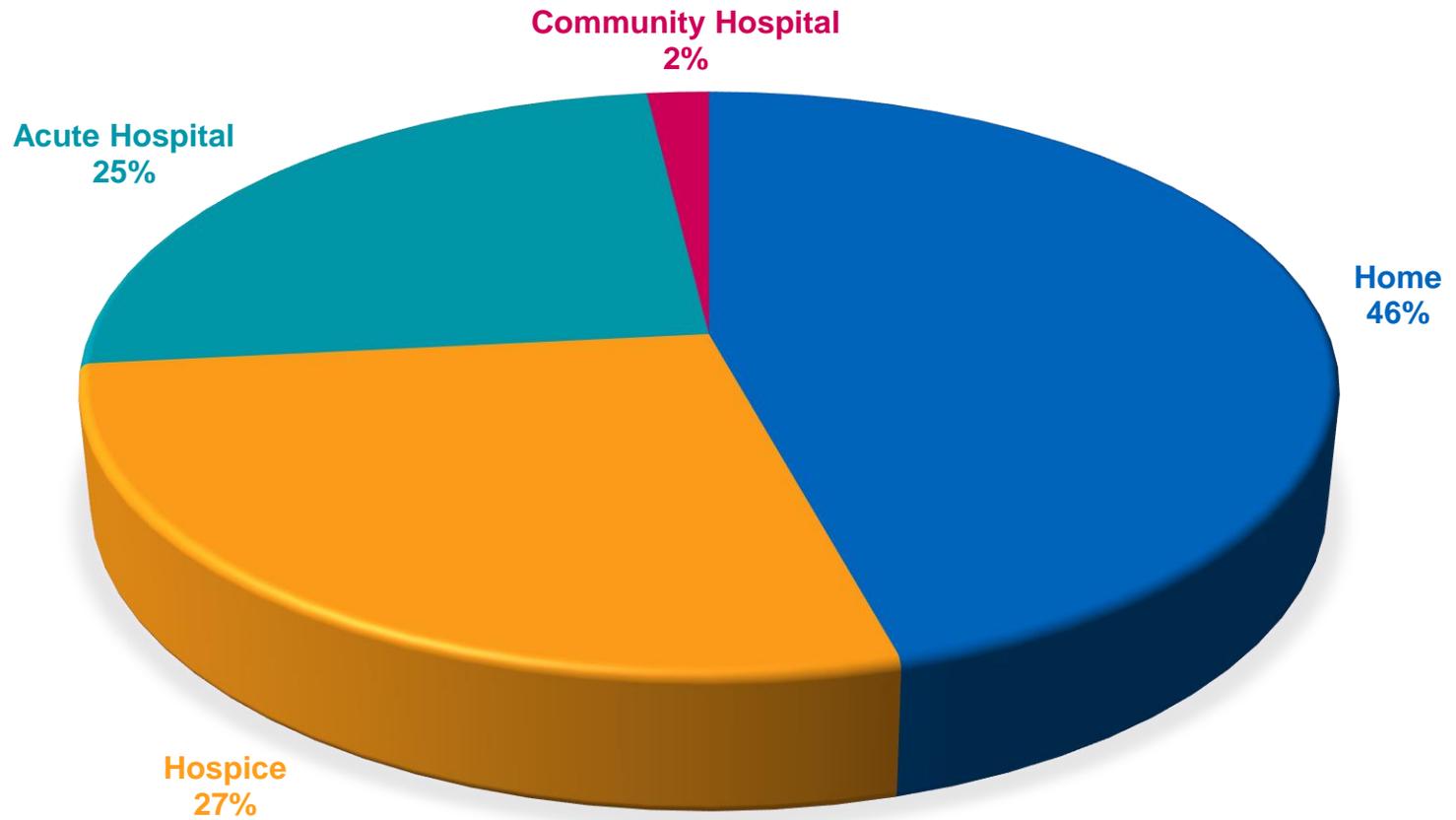


# Patient spread at initial review

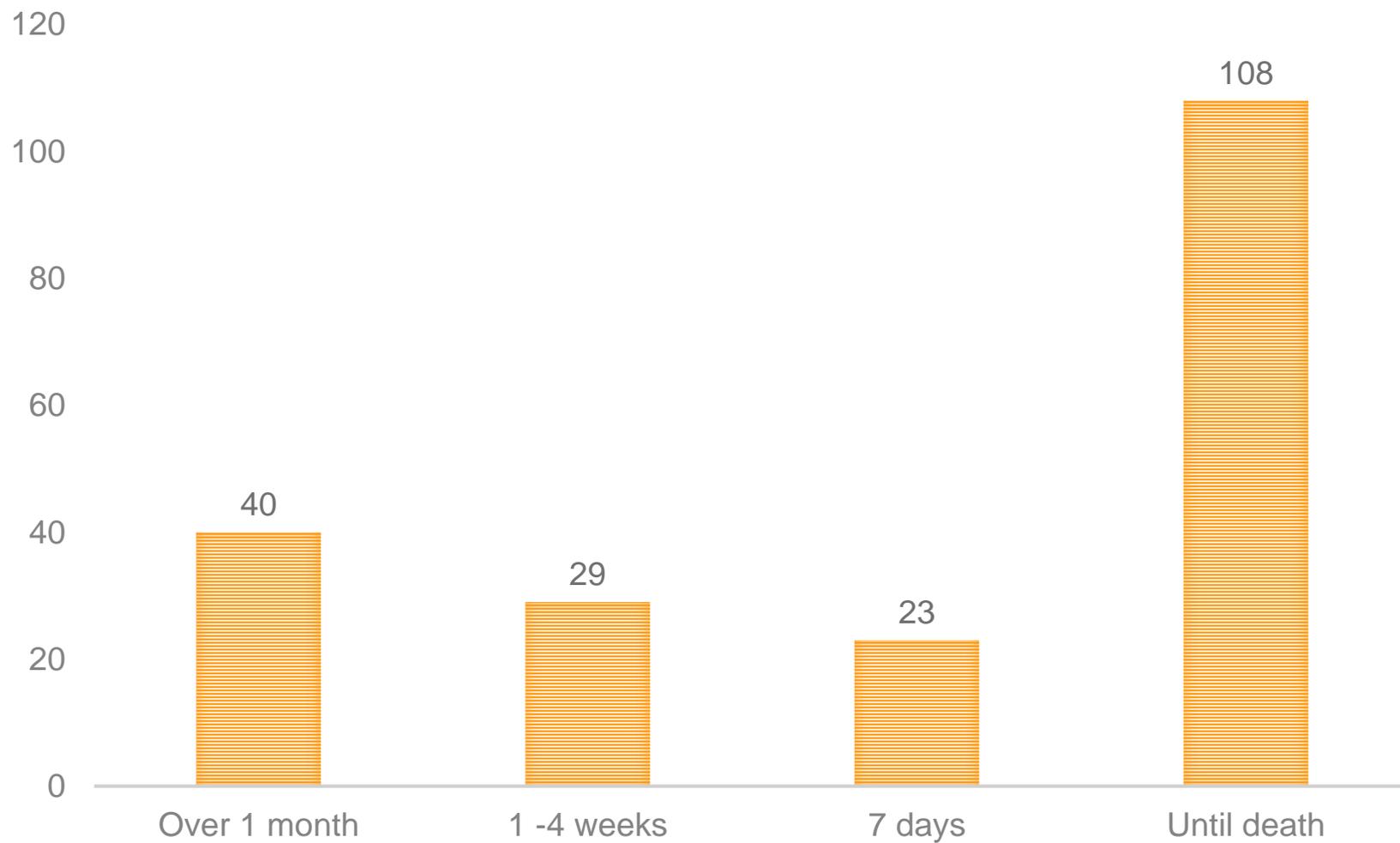
- 44% metastatic
- 60% during chemotherapy (majority palliative)
- 59% known to specialist palliative care services

36 Noble S, Banerjee S, Pease N. Anticoagulation for Cancer Associated Thrombosis at the End of Life: Review of a Case Series of 214 Patients. *Palliative Medicine* 32(1S) 47-48

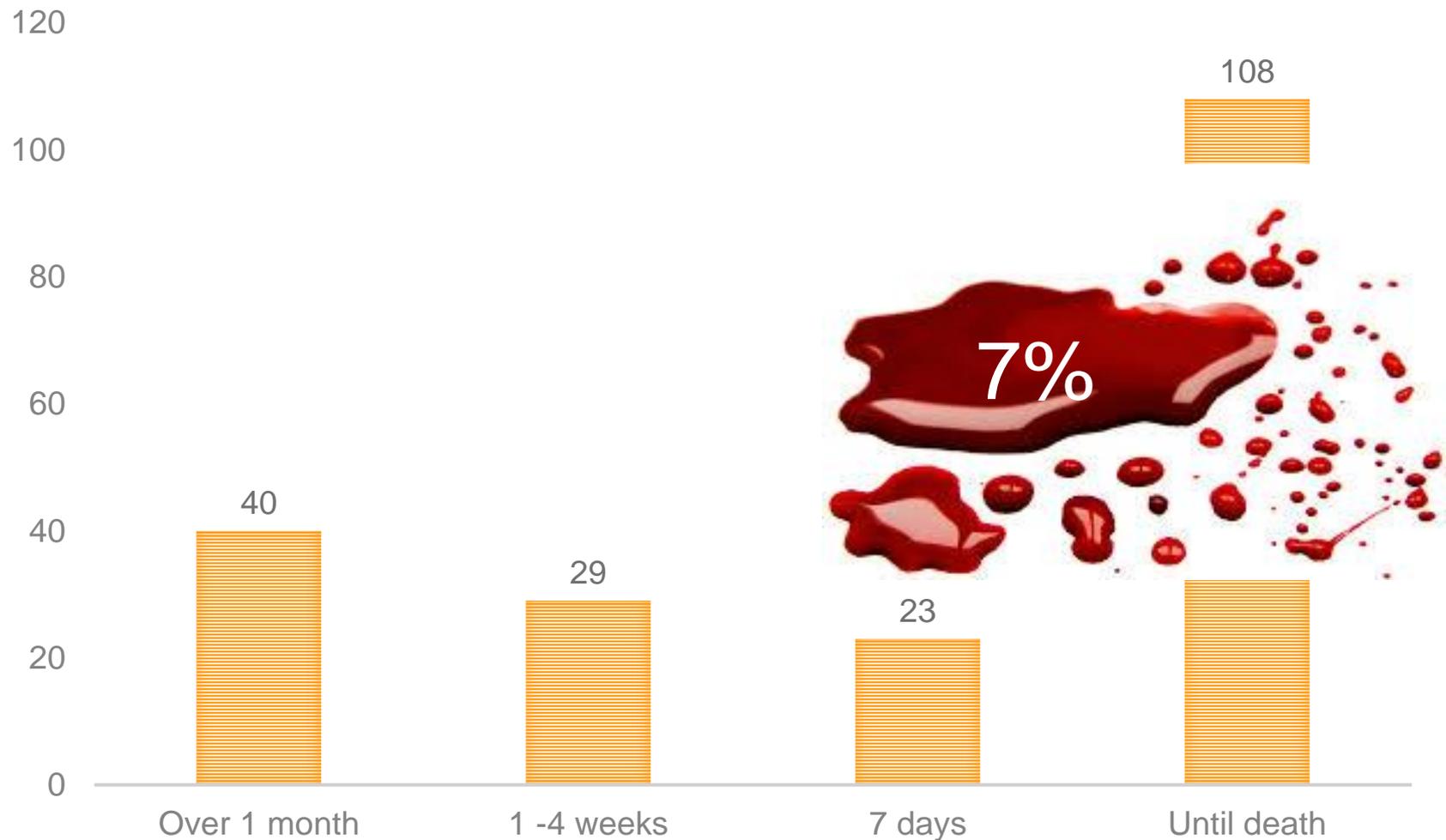
# Place of death



# When anticoagulation stopped



# When anticoagulation stopped



# Data suggests bleeding risk high in cancer patients near end of life

- **Strong case to stop anticoagulants for CAT**
- **Cancer patients anticoagulated for atrial fibrillation**
- **Antiplatelets in cancer patients**
  
- **For non cancer patients:**
  - What symptom control does this drug bring?

# To conclude

1. Very little data to guide deprescribing at end of life
2. Clinical acumen vital
3. Discussion with patients essential
4. Don't assume you know what patient is thinking
5. Adapt strategy based on each patient's condition, expectations and fears

**THANK YOU**