PROGNOSTICATION

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The New York Times

SundayReview | OPINION

How Long Have I Got Left?

By PAUL KALANITHI JAN. 24, 2014

AS soon as the CT scan was done, I began reviewing the images. The diagnosis was immediate: Masses matting the lungs and deforming the spine. Cancer. In my neurosurgical training, I had reviewed hundreds of scans for fellow doctors to see if surgery offered any hope. I'd scribble in the

The path forward would seem obvious, if only I knew how many months or years I had left.

Tell me three months, I'd just spend time with family. Tell me one year, I'd have a plan (write that book). Give me 10 years, I'd get back to treating diseases.

DEFINITION OF PROGNOSIS

The prospect of recovery as anticipated from the usual course of a disease

A judgment about what is going to happen in the future

PROGNOSTIC AWARENESS

Prognostic awareness is a patient's capacity to understand his or her prognosis and the likely illness trajectory.

When patients hold an <u>inaccurate</u> perception of their goals of treatment or the likely outcome of their illness, we consider them to have low or poor prognostic awareness.

WHY DO WE WANT OUR PATIENTS TO BE AWARE OF THEIR PROGNOSIS?

Patients' perception of their prognosis impacts their decisions about medical care

Patient Estimate of Their Chance of Surviving 6 Months	Proportion Favoring Life-Extending Therapy	Odds Ratio (95% CI)
$\geq$ 90 %	198/390 (51%)	2.6 (1.8-3.7)
< 90%	61/216 (28%)	

Weeks JAMA 279 (21) 1998

PROGNOSTIC AWARENESS IMPACTS COMMUNICATION ABOUT HOSPICE

Self-Reported Prognosis	Discussed Hospice (%)	*P* value
< 1 year	44.8	0.001
≥ 1 year but < 2 years	37.8	
≥ 2 years but < 5 years	16.0	
≥ 5 years	11.7	
"In god's hands"	15.7	
Do not know	18.5	

Huskamp 169 (10) 2009

PALLIATIVE CARE IN THE INTENSIVE CARE UNIT

- In US: 26% increase in the number of intensive care beds.
- One in five patients receives terminal care in the intensive care setting.
- Of all hospital deaths, 47% receive intensive care services during the terminal admission with less than 20% of these patients having completed an advance directive.
- Do-not attempt- resuscitation orders are often written within days of death.
- Conversations occur late in the disease trajectory, patients and families perceive have an emotional distress.

Crit Care Nurs Clin North Am. 2014 Dec;26(4):551-558.

LAST CHAPTER OF LIFE IS CHARACTERIZED BY 3MAJOR DEFICIENCIES

(1) unnecessary suffering

(2) unacceptable variation in treatment with striking excesses in non-beneficial treatment

(3) unsustainable costs

- 40% of Centers of Medicare and Medicaid Services costs occur in the last 30 days of life.

Figure 1. Distribution of Medicare Payments in the Last Year of Life, According to the Number of Days before Death, 1976 and 1988. For purposes of this analysis, the year was considered to consist of 360 days, divided into intervals of 30 days each.

Lubitz JD, Riley GF. Trends in Medicare payments in the last year of life. NEJM 1993;328:1092–6.

What's the problem with waiting?

Patients and their families don't know unless you tell them

Cherlin Journal of Palliative Medicine 8 (6) 2005

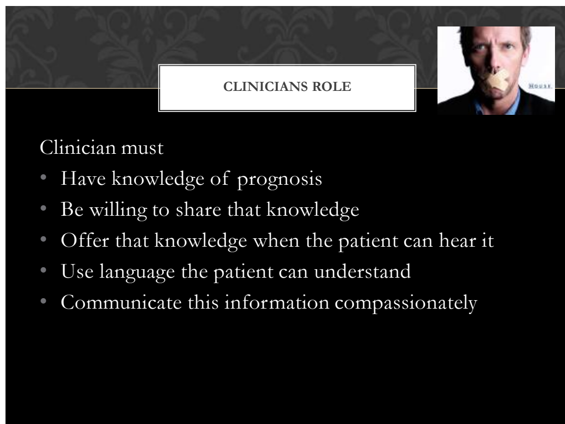
PROGNOSTICATION CONSISTS OF TWO PARTS

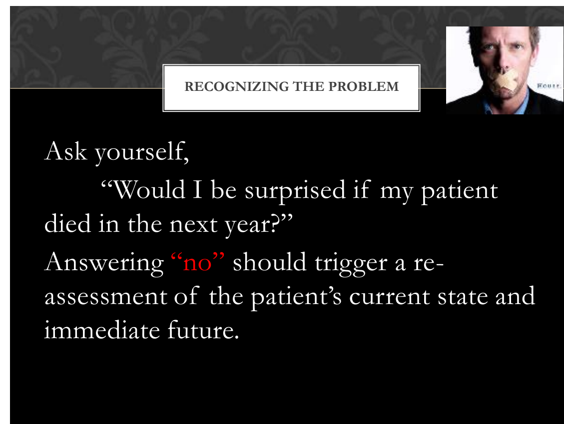
1. foreseeing (estimating prognosis)
2. foretelling (discussing prognosis).

HOW DO WE HELP PATIENTS ACHIEVE PROGNOSTIC AWARENESS?

Clinician roles

Patient roles





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JOURNAL OF CLINICAL ONCOLOGY — COMMENTS AND CONTROVERSIES

Reasons Why Physicians Do Not Have Discussions About Poor Prognosis, Why It Matters, and What Can Be Improved

Jennifer W. Mack, Dana-Farber Cancer Institute and Children's Hospital, Boston, MA
Thomas J. Smith, Johns Hopkins Medical Institutions, Baltimore, MD

Fig 1. The effect of truthful information on the Herth Hope Index. Hope does not change with honest cancer information about prognosis and options. Data adapted with permission.[2]

Reasons Why Physicians Do Not Have Discussions About Poor Prognosis, Why It Matters, and What Can Be Improved

X Involvement of Hospice or Palliative Care Will Reduce Survival — Incorrect

✓ We Do Not Really Know a Patient's Prognosis — True

"But doctor can range of possible outcomes that can bring the patient's understanding closer to the truth"

X Talking About Prognosis Is Not Culturally Appropriate

Incorrect. , different preferences by ethnicity should not dictate communication with individuals.

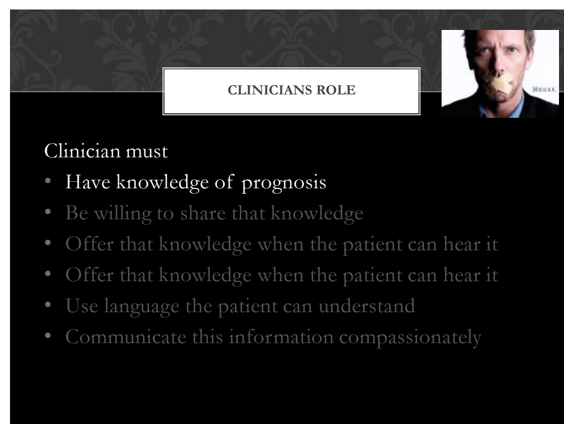
✓ We Do Not Like to Have These Discussions?

✓ True: Most oncologists find breaking bad news to be stressful, and few find it satisfying

Table 2. Responses to the Following Survey Question: Of the Following Examples, Choose Which One Best Summarizes Your Communications With Your Advanced Cancer Patients About Their Prognosis? (n = 710)

Survey Item	No. of Respondents	%
I do not discuss prognosis with my patients	3	0.4
I discuss it if my patients ask about it	115	16
I ask my patients if they want to know their prognosis and discuss it if they say yes	236	33
I always discuss my patients' prognoses with them because they need to know it	303	42
Other	65	9
Missing	7	

Daugherty JCO 26 (36) 2008



DOCTORS ARE POOR PROGNOSTICATORS

Clinician predicted survival (CPS) is formulated solely on the basis of the clinician's knowledge and experience.

FORESEEING

•Requires knowledge of the natural history of disease (trajectory) an understanding of how treatment could modify survival an appreciation of individual patient related factors such as comorbidities.

TOOLS FOR DO THE PROGNOSTICATION

•1. clinical prediction of survival (CPS)

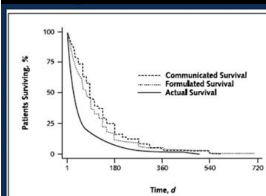
erroneous 30 % of the time in expert hands.

A study by Christakis. He asked 343 physicians to provide survival estimates for 468 terminally ill patients at the time of hospice referral.

- Only 20% of predictions were accurate (as defined as within 33% of actual survival).
- Overall, doctors overestimated by a factor of 5.3

BMJ. 2000; 320:469-472

HOW MUCH OF ACCURACY FOR THE PREDICTION THE PROGNOSTICATION FROM THE DOCTORS?



What this study adds

A prospective cohort study of 504 terminally ill patients and their 365 doctors found that only 20% of the doctors' predictions were accurate: 63% were overoptimistic and 17% overpessimistic

Lamont Annals 134 (12) 2001, Christakis BMJ (32) 2000

Bmj. 2003;327(7408):195-8.

DISEASE TRAJECTORY

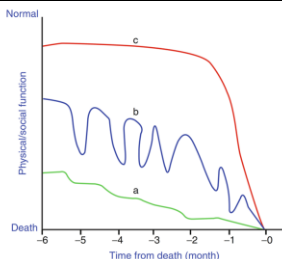


Fig. 1.1 Disease trajectories over the last 6 months of life for patients with (*a*) dementia, (*b*) chronic obstructive pulmonary disease (COPD) and cardiac heart failure (CHF), and (*c*) cancer (Adapted with permission from RAND Health; Lynn and Adamson 2003)

Murray S A et al. BMJ 2005;330:1007-1011

DETERMINING PROGNOSIS IN ADVANCED CANCER

Several common cancer : prognosis

- Malignant hypercalcemia: 8 weeks, except newly diagnosed breast cancer or myeloma
- Malignant pericardial effusion: 8 weeks
- Carcinomatous meningitis: 8-12 weeks
- Multiple brain metastases: 1-2 months without radiation; 3-6 months with radiation.
- Malignant ascites ,malignant pleural effusion or bowel obstruction: < 6 months.

http://www.mcw.edu/FileLibrary/User/jrehm/fastfactpdfs/Concept013.pdf

TOOLS FOR DO THE PROGNOSTICATION

2. Statistical estimate of survival:

- Performance status (PS) : ECOG, KPS; A median survival < 3 months roughly correlates with a Karnofsky score <40 or ECOG > 3
- Multiple demographic factors tools: PaP, PPS, PPI

ECOG SCORE (EASTERN COOPERATIVE ONCOLOGY GROUP)

- 0 – Asymptomatic
  - (Fully active, able to carry on all pre-disease activities without restriction)
- 1 – Symptomatic but completely ambulatory
  - (Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature. For example, light housework, office work)
- 2 – Symptomatic, <50% in bed during the day
  - (Ambulatory and capable of all self care but unable to carry out any work activities. Up and about more than 50% of waking hours)
- 3 – Symptomatic, >50% in bed, but not bedbound
  - (Capable of only limited self-care, confined to bed or chair 50% or more of waking hours)
- 4 – Bedbound
  - (Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair)
- 5 – Death

KARNOFSKY SCORING

- Dr. David A. Karnofsky, who described the scale with Dr. Joseph H. Burchenal in 1949 has purposed to evaluate a patient's ability to survive chemotherapy for cancer.

Table 1. Karnofsky Performance Scale

	%	Criteria
Able to carry on normal activity and to work; no special care needed.	100	Normal; no complaints; no evidence of disease
	90	Able to carry out normal activity; minor signs or symptoms of disease
	80	Normal activity with effort; some signs or symptoms of disease
Unable to work; able to live at home and care for most personal needs; varying amount of assistance needed.	70	Cares for self, unable to carry on normal activity or do active work
	60	Requires occasional assistance, but is able to care for most of his/her needs
	50	Requires considerable assistance and frequent medical care
Unable to care for self; requires equivalent of institutional or hospital care; disease may be progressing rapidly.	40	Disabled; requires special care and assistance
	30	Severely disabled; hospitalization is indicated although death not imminent
	20	Very sick; hospitalization necessary, active supportive treatment necessary
	10	Moribund; fatal processes progressing rapidly
	0	Dead

A median survival of 3 months roughly correlates with a Karnofsky score <40 or ECOG > 3.

http://www.mypcnow.org/blank-hh45g

PROGNOSTIC FACTORS

- Laboratory variables
  - Leukocytosis
  - Lymphocytopenia
  - Hypoalbuminemia
  - Elevated lactate dehydrogenase (LDH)
  - Elevated C-reactive protein (CRP)

PALLIATIVE PERFORMANCE SCALE (PPS)

- (PPS) is a modification of the KPS
- PPS is a reliable and valid tool and correlates well with actual survival and median survival time for cancer patients.
- The Palliative Performance Scale (PPS) uses five observer-rated domains correlated to the Karnofsky Performance Scale (100-0).

EXERCISE

- 77 years old , Prostate cancer patient with bone, liver metastases,
- clinical: fatigue from cancer, usually stay on bed, need help in a short distance walking, able in self care, conscious, normal eat function.
- Underlying disease: DM, COPD

Exercise

Using the PPS

1. Prostate cancer patient with bone metastases, clinical: fatigue from cancer, usually stay on bed, need help in a short distance walking, able in self care, conscious, normal eat function.

PPS 40 = 18-41 days

a. Survival post-admission to an inpatient palliative unit, all diagnoses (Virik 2002).
b. Days until inpatient death following admission to an acute hospice unit, diagnoses not specified (Anderson 1996).
c. Survival post admission to an inpatient palliative unit, cancer patients only (Morita 1999).
http://www.eperc.mcw.edu/EPERC/FastFactsIndex/ff_125.htm

%	Ambulation	Activity Level Evidence of Disease	Self-Care	Intake	Level of Consciousness	Estimated Median Survival in Days (a)	(b)	(c)
100	Full	Normal *No Disease*	Full	Normal	Full	N/A	N/A	108
90	Full	Normal *Some Disease*	Full	Normal	Full			
80	Full	Normal with Effort *Some Disease*	Full	Normal or Reduced	Full			
70	Reduced	Can't do normal job or work *Some Disease*	Full	As above	Full	145		
60	Reduced	Can't do hobbies or housework *Significant Disease*	Occasional Assistance Needed	As above	Full or Confusion	29	4	
50	Mainly sit/lie	Can't do any work *Extensive Disease*	Considerable Assistance Needed	As above	Full or Confusion	30	11	41
40	Mainly in Bed	As above	Mainly Assistance	As above	Full or Drowsy or Confusion	18	8	
30	Bed Bound	As above	Total Care	Reduced	As above	8	5	
20	Bed Bound	As above	As above	Minimal	As above	4	2	6
10	Bed Bound	As above	As above	Mouth Care Only	Drowsy or Coma	1	1	
0	Death	-	-	-	--			

PALLIATIVE PROGNOSTIC INDEX (PPI)

Table 3. Palliative Prognostic Index (PPI)

			Max. Possible
Palliative Performance Scale	10 – 20	4.0	4.0
	30 – 50	2.5	
	> 60	0	
Oral Intake	Severely Reduced (≤ mouthfuls)	2.5	2.5
	Moderately Reduced (> mouthfuls)	1.0	
	Normal	0	
Edema	Present	1.0	1.0
	Absent	0	
Dyspnea at rest	Present	3.5	3.5
	Absent	0	
Delirium	Present	4.0	4.0
	Absent	0	
	Total		15

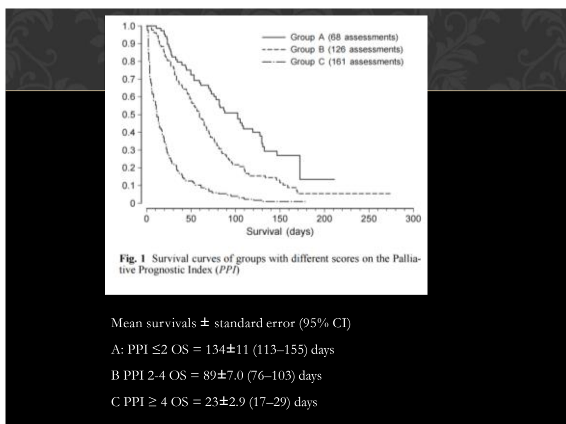


Fig. 1 Survival curves of groups with different scores on the Palliative Prognostic Index (*PPI*)

Mean survivals ± standard error (95% CI)

A: PPI ≤2 OS = 134±11 (113–155) days

B PPI 2-4 OS = 89±7.0 (76–103) days

C PPI ≥ 4 OS = 23±2.9 (17–29) days

PALLIATIVE PROGNOSTIC SCORE (PAP)

The Palliative Prognostic Score (PaP)

CRITERION	ASSESSMENT	PARTIAL SCORE
Dyspnea	No	0
	Yes	1
Anorexia	No	0
	Yes	1.5
Karnofsky Performance Status	≥30	0
	10 - 20	2.5
Clinical Prediction of Survival (weeks)	>12	0
	11-12	2
	7-10	2.5
	5-6	4.5
	3-4	6
	1-2	8.5
Total WBC ($x10^9$/L	≤8.5	0
	8.6 - 11	0.5
	>11	1.5
Lymphocyte Percentage	20 - 40%	0
	12 - 19.9%	1
	< 12%	2.5
RISK GROUP	**30 DAY SURVIVAL**	**TOTAL SCORE**
A	**>70%**	**0 - 5.5**
B	**30 - 70%**	**5.6 - 11**
C	**< 30%**	**11.1 - 17.5**

- The PaP uses the Karnofsky Performance Score (KPS) and 5 other criteria
  - Dyspnea, Anorexia, KPS, Clinical Prediction of Survival (weeks), Total WBC (x109/L, Lymphocyte Percentage.
  - Generate a numerical score from 0 to 17.5 to predict 30 day survival (higher scores predict shorter survival).

http://www.eperc.mcw.edu/EPERC/FastFactsIndex/ff_124.htm

PROGNOSIS WEB TOOL

- ❑ Adjuvant online: breast cancer
- ❑ ePrognosis: www.eprognosis.org

ePrognosis HOME ABOUT CALCULATORS ▾ CANCER SCREENING COMMUNICATION

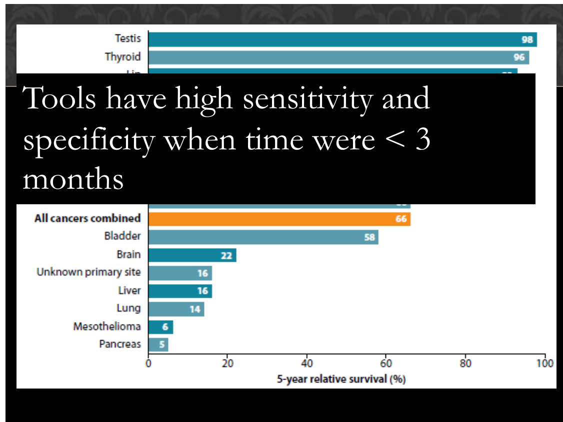
Lee Index

Results Based on Score:

Your total score is **21**

Four Year Mortality

Points	Risk of 4 year mortality
0-3	< 5%
4-6	6-9%
7-8	15-20%
9-10	20-28%
11-12	44-45%
13	59%
14+	64%



FORETELLING

- ❑ The delivery of prognostic information in a clear, sensitive, and compassionate manner and represents a longitudinal process of communication rather than a single discussion.

DISCUSSING PROGNOSIS

- ❖ Confirm that the patient/family are ready to hear prognostic information.
- ❖ Present information using a range: a few days to weeks; 2-4 months, etc.
- ❖ Allow silence after you provide information; respond to emotion
- ❖ Use prognostic information as a starting point for eliciting end-of-life goals

http://www.mcw.edu/FileLibrary/User/jrehm/fastfactpdfs/Concept013.pdf

PITFALL IN TELL PROGNOSIS

- ❑ Guessing doesn't work
- ❑ Avoiding doesn't help.
- ❑ Bluntness almost always injure
- ❑ Be culturally and individually careful

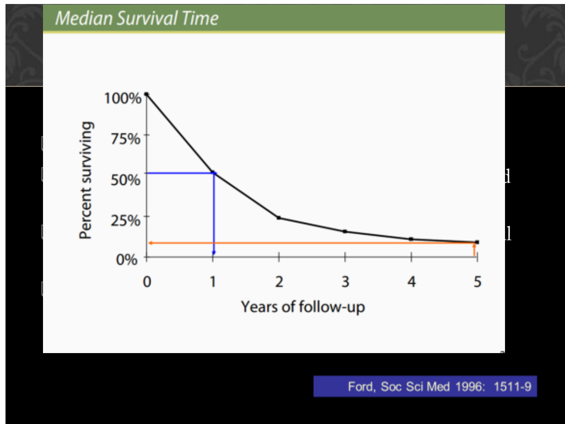
SPIKES Model for Breaking Bad News

- ❑ Setting up the interview
- ❑ Perception of the patient
- ❑ Invitation by the patient
- ❑ Knowledge to the patient
- ❑ Emotions of the patient
- ❑ Strategy and summary

THE MEDIAN IS NOT THE MESSAGE

- ❑ Technical language frequently unclear
- ❑ 100 women with breast cancer: 73% misunderstood "median survival"
- ❑ No agreement on what a "good" chance of survival meant numerically
- ❑ Medical jargon can make bad news worse

Ford, Soc Sci Med 1996: 1511-9



PATIENTS' ROLE

Steps to Achieve Prognostic Awareness

- Patient must:
  - Understand and accept what they have been told
  - Feel comfortable writing it down on a piece of paper

ASCO ANNUAL MEETING '16

CANCER DIAGNOSIS AND PROGNOSIS IN TAIWAN: PATIENT PREFERENCES VERSUS EXPERIENCES

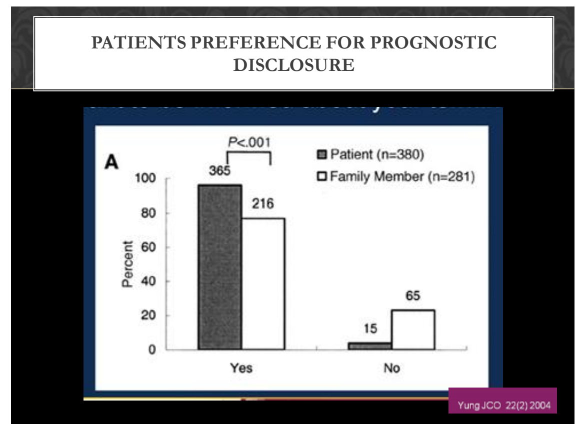
Table 4. Comparison of preferences of information disclosure to oneself or family

WHO: บอกใคร ผู้ป่วย VS ครอบครัว

Inform oneself	358	1–5	4.13	0.85	7.15	<0.0001
Inform family	338	1–5	3.71	0.99		
Inform oneself prior to informing family	338	1–5	3.72	0.96	7.98	<0.0001
Inform family prior to informing oneself	335	1–5	3.08	0.96		
Prognosis						
Inform oneself	357	1–5	3.97	0.90	4.45	<0.0001
Inform family	353	1–5	3.69	0.97		
Inform oneself prior to informing family	240	1–5	3.74	0.98	8.07	<0.0001
Inform family prior to informing oneself	238	1–5	2.97	0.94		

Psycho- Oncol ogy 13: 1–13 (2004)

PATIENTS PREFERENCE FOR PROGNOSTIC DISCLOSURE



INFORMATION NEEDS OF CANCER PATIENTS IN WEST SCOTLAND: CROSS SECTIONAL SURVEY OF PATIENTS' VIEWS

Table 2—*Responses of 250 cancer patients to specific questions about need for information. Values are numbers (percentages)*

Question	Do not want to know	Would like to know	Absolute need to know
Whether illness is cancer	11 (4)	59 (24)	179 (72)
What is specific medical name of illness	62 (25)	114 (46)	74 (30)
What is week by week progress	24 (10)	105 (42)	121 (48)
What are chances of cure	23 (9)	77 (31)	149 (60)
What are all possible treatments	34 (14)	80 (32)	134 (54)
What are all possible side effects of treatment	14 (6)	52 (21)	183 (73)
Exactly how treatment works to treat illness	15/75 (20)	91 (36)	108 (43)

BMJ 1996;313:724-6

Table 2. Specific Prognostic Information Desired

Type of Prognostic Information	Want, % of Patients	Do Not Want, % of Patients	% Responding
Common side effects of treatment	99	1	96
Treatment options	98	2	97
Common symptoms from the cancer	97	3	96
Chance that the treatment will improve symptoms	96	4	96
Uncommon symptoms from the cancer	88	12	94
Chances of treatment shrinking the cancer	95	5	98
Likely time you will be without symptoms	92	8	93
Factors which make my prognosis better or worse than average	92	8	94
Uncommon treatment side effects	91	9	94
The longest time you might live, if treatment worked as well as could be expected	85	15	94
Average length of time you would be likely to live	81	19	95
The chance of living 5 years	80	20	92
Chance of living 1 year	65	35	91
The longest time you might live without treatment	76	24	94
The shortest time you might live without treatment	72	28	94

Hagerty JCO 22 (9) 2004

Presented By Jennifer Temel at 2016 ASCO Annual Meeting

WHEN FAMILY SAYS:
"DON'T TELL"

DEALING WITH COLLUSION

- Family : " It would kill him – I don't want you to tell him"
- Can be avoided if patients are consulted first about their diagnosis
- Gain the relatives trust
- Assess the relatives understanding of the disease and reason for not telling the patient
- What does the patient know?
- Discuss the consequences of not telling
- Establish ground rules with the family

แนวทางการบอกการพยากรณ์โรค

- ไม่จำเป็นต้องบอก Prognosis ทุกคน, แต่ควรบอกเสมอเมื่อพร้อม
- แต่เป็นสิ่งที่ควรมีการพูดคุย โดยให้ดูความพร้อมและความต้องการของผู้ป่วยเป็นหลัก
- เวลาบอกควรแจ้งให้ผู้ป่วยทราบว่า ข้อมูลที่เรามีเป็นเพียงการประมาณจากข้อมูลทางสถิติเท่านั้น อาจจะอยู่ได้นานกว่าหรืออาจจะอยู่ได้สั้นกว่าที่เราบอกก็เป็นไปได้ ทั้งนี้ขึ้นอยู่กับการดำเนินโรคและภาวะแทรกซ้อนต่างๆที่อาจจะเกิดขึ้น ซึ่งเป็นสิ่งที่เฉพาะตัวของผู้ป่วยแต่ละคน
- เวลาบอกไม่ควรบอกระยะเวลาที่เป็นตัวเลขแน่นอน เช่น เป็นเดือนๆ เป็นสัปดาห์ หรือเป็นวัน

แนวทางการบอกการพยากรณ์โรค

- สิ่งที่ควรถามเสมอหากผู้ป่วยถามเรื่อง Prognosis คือ ต้องประเมินว่าผู้ป่วยยังมีสิ่งอะไรที่อยากจะทำอยู่หรือไม่ (Unfinished business
- ฟังผู้ป่วยอย่างตั้งใจและแสดง Empathy ขณะทำการแจ้ง Prognosis ทุกครั้ง พึงระลึกไว้เสมอว่า สิ่งที่ยากอันหนึ่งของผู้ป่วยระยะสุดท้าย คือ ความรู้สึกว่าใช้ชีวิตอยู่บนความไม่แน่นอนกับความกังวลกับสิ่งต่างๆที่อาจจะเกิดขึ้นในอนาคต
- ทีมที่ดูแลควรพยายามค้นหาความหมายของคำถามที่ซ่อนอยู่ ว่าทำไมผู้ป่วยถึงต้องการทราบ Prognosis ของตัวเอง
- การบอก Prognosis ไม่จำเป็นต้องทำลายความหวังของผู้ป่วยเพราะความหวังเป็นสิ่งที่มีค่า

NOT ONLY PATIENTS
EVALUATED FAMILY ,TOO

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Burden and Depression Among Caregivers of Patients with Cancer at the End-of-life

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NOT ONLY PATIENTS,
EVALUATED FAMILY TOO

Published in final edited form as:

Key Points

- Increasingly, cancer care is provided in the home, with family members taking on the role of primary caregivers, assisting patients with activities related to everyday tasks and with medical procedures at home.
- The effects of providing care for patients with cancer at the end-of-life on caregiver burden and depression have not yet been adequately explored.
- Middle aged, adult children, and employed family caregivers reported higher levels of depressive symptoms than their counterparts. Regarding caregiver burden, female, non-spouse, and adult children caregivers reported a high perception of feeling abandoned, and adult children caregivers of patients with early stage cancer and patients with multiple symptoms reported a high perception of disruption in their schedule due to providing care.

Mohammad Rahbar, Ph.D. [Biostatistician]
Michigan State University

Depression and anxiety among caregivers of patients with advanced cancer

Ryan Nipp • Joel Fishbein • Areej El-Jawahri • Bill Pirl • Justin Eusebio
Samantha Moran • Caitlin McCarty • Emily Gallagher • Elyse Park
Vicki Jackson • Joe Greer • Jennifer Temel

Massachusetts General Hospital Cancer Center

PRESENTED AT: PALLIATIVE CARE IN ONCOLOGY SYMPOSIUM

Ryan David, J Clin Oncol 33, 2015 (suppl 29S; abstr 224)

STRATEGIES

- Clinician directed interventions
- Early palliative care

Early Palliative Care

Variable	Usual Care	Early PC	P-Value
Primary goal of cancer treatment is cure	34.5%	28.7%	0.29
Prefer to extend life as long as possible, even if meant more pain and discomfort	34.5%	33.6%	0.99
Knowing about prognosis is very/extremely helpful for:			
Making decision about treatment	89.8%	96.5%	0.04
Coping with the disease	83.6%	97.3%	<0.01
Discussed wishes about care if dying	14.5%	30.2%	<0.01

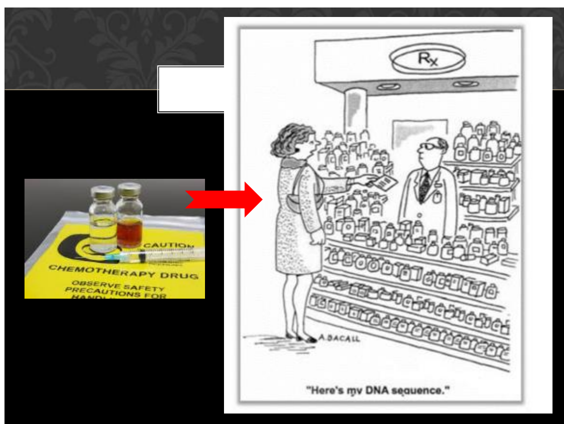
PRESENTED AT: ASCO ANNUAL MEETING '16

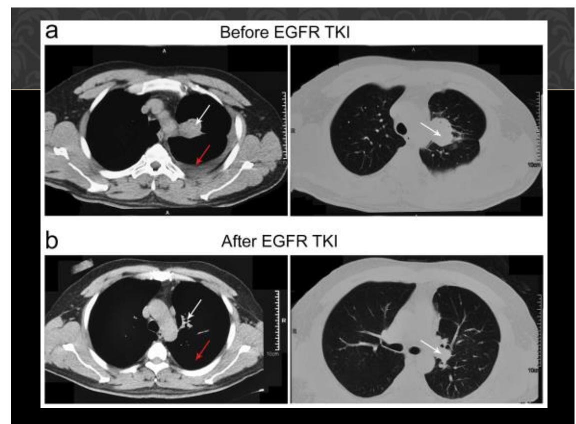
Temel ASCO 2016 Abstract # 10003

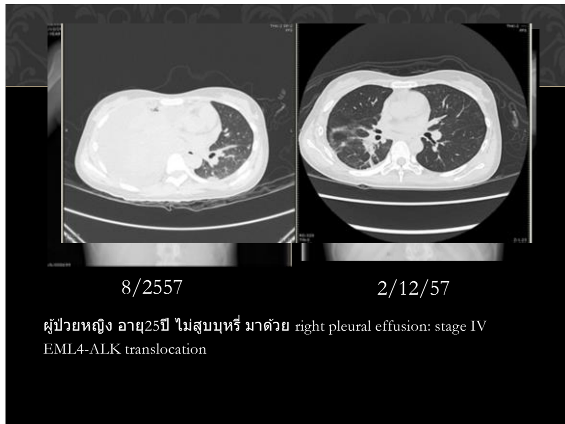
Presented By Jennifer Temel at 2016 ASCO Annual Meeting

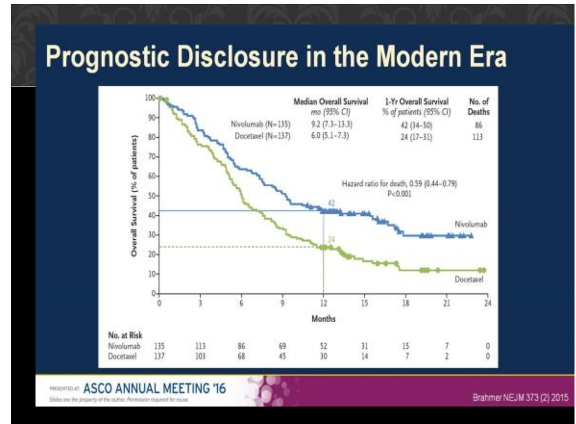
UNCERTAINLY OF PROGNOSIS IN ONCOLOGY

- Uncertainly has always been a challenge for the oncologists when formulating a prognosis.









PERJETA AND HERCEPTIN BIND TO DIFFERENT DOMAINS ON HER2 AND HAVE COMPLEMENTARY MECHANISMS OF ACTION

HER1, 3, 4 — Pertuzumab — HER2 — Trastuzumab

Pertuzumab binds to **subdomain II** and inhibits **ligand-dependent** signalling[1]
Trastuzumab binds to **subdomain IV** and inhibits **ligand-independent** intracellular signalling[2]
The pertuzumab–trastuzumab combination offers a more comprehensive HER2 blockade[3,4]

Figure adapted from: 1. Franklin MC, *et al. Cancer Cell* 2004; **5**:317–328; 2. Junttila TT, *et al. Cancer Cell* 2010; **15**:429–440; 3. Nahta R, *et al. Cancer Res* 2004; **64**:2343–2346; 4. Scheuer W, *et al. Cancer Res* 2009; **69**:9330–9336;

CLEOPATRA: CONFIRMATORY OS ANALYSIS OF PHASE III PERTUZUMAB STUDY

- A second interim analysis of OS was performed with an additional 1 yr of follow-up **(Results at median FU of 30 mos)**

Second Interim OS Analysis	Pertuzumab Arm	Placebo Ar m	HR (95% CI)	*P* Value
3-yr estimated, %	66	50	0.66 (0.52-0.84)	.0008
Median OS, mos	Not reached	37.6		

Swain SM, et al. SABCS 2012. Abstract P5-18-26.

OS of 40.8 months in the placebo arm and 56.5 months in study arm

ESMO 2014

PALLIATIVE IN TARGETED THERAPY ERA

- Media and raise hopes in patients and among experts

Patel et al. 2014

- *www.mycancergenome.org* can check the availability of specific treatment options

TIME HOW TO CURE CANCER — TIME CANCER — TIME CANCER — TIME THERE IS NEW AMMUNITION IN THE WAR AGAINST CANCER. THESE ARE THE BULLETS. — TIME Inside the brutally selective, hugely expensive, lifesaving trials of immunotherapy.

PALLIATIVE IN TARGETED THERAPY ERA

Patients usually misled by incomplete or wrong information in the lay media. And dream to the new clinical trial.

But, only about 3 % of adults with advanced cancer enroll on trials.

Because of :

1. highly selected cases. "Real-life" patients are typically older and have more comorbidities.
2. In addition, clinical trials are usually conducted only in high-volume and highly experienced centers to ensure rapid accrual of patients.
3. Many new drugs usually give shortly time of response
4. Mostly, the response is just SD or PR and not CR.

Townsley et al. 2005

PALLIATIVE IN TARGETED THERAPY ERA

- No definite guideline of treatment with targeted therapy in patients with Advanced cancer in terminal stage.
- A classic "palliative" patient with known targets for drugs who never received these drugs should be informed about these treatment options.
- On the other hand, if palliative care without anticancer treatment options is the way to go, it should be palliative care and not leaving the patients alone
- Lester et al. 2013

HOW TO DO?

- Only some patients, not all can received the new treatments and mostly of patients have transition to terminal stage.
- Assess and follow up the clinical response and take action.

Diagnosis	Throughout illness	Significant decline
Disclose incurable nature of illness	Refine prognosis and address goals of care	Recommend transition to focusing on comfort

Presented By Jennifer Temel at 2016 ASCO Annual Meeting

CONCEPTUAL MODEL FOR INTEGRATION OF PALLIATIVE/SUPPORTIVE CARE IN ONCOLOGY

The Oncologist 2012;17:267–273

A Solo Practice Model

B Congress Practice Model

C Integrated Care Model

ELEMENTS OF PALLIATIVE CARE (PC) VS ONCOLOGIC CARE VISITS AT CLINICAL TURNING POINTS. (END OF LIFE)

Figure 2. Elements of palliative care (PC) vs oncologic care visits at clinical turning points. EOL indicates end of life.

CONCLUSION

- Using prognostic tools can improve accuracy and reinforce clinical judgment. "Doctor initiating"
- Practice assessing and communicating.
- Hope is like dignity and can be crushed in an instant.
- Unrealistic hope can destroy dreams and plans.
- Closer to death, patients often want less information, whereas families need more.

Toward the end of life, things never stay the same for long; thus, it is crucial to review, revise, and refine.

- Assess and follow up the clinical response and take action

'Even if I'm dying, until I actually die, I'm still living.'

PAUL KALANITHI

WHEN BREATH BECOMES AIR

"I can't go on. I'll go on." I took a step forward, repeating the phrase over and over: "I can't go on. I'll go on." And then, at some point, I was through.

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What did he tell me to do?
We can't afford the medication we need.
My questions can wait..he's too busy.
He doesn't need to know I take garlic instead of Lipitor.
Oh by the way... nah..that pain in my chest can wait.
I love patients that do what I tell them.
HDL is a bit high... but as his age why be too aggessive.
No questions..good. He must understand what I told him.
YOUR
ATTENTION
Doctor-Patient Communication