

## COMMENTARY

# Determining Prognosis in Patients with Advanced Incurable Cancer

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### INTRODUCTION

Physicians caring for patients with advanced incurable cancers have difficulty in formulating accurate prognosis and communicating them. An accurate prognosis enables patients with terminal cancer to make plans, put their affairs in order and decide how they want to spend the time they have left. A prognosis helps the physician to decide about further treatment plan, to prevent/avoid invasive and ineffective medical therapy; also physician can decide appropriate supportive therapy in time.

Traditionally, physicians have estimated prognosis using their clinical experience. However studies have shown that subjective estimates are far from accurate. Reason may be either patients misinterpret communication about prognosis or they want to deny poor prognosis. Another reason of inaccurate prognosis is; physician find it difficult or stressful or they find themselves inadequately trained in prognostication.<sup>1</sup>

A lot of research has gone into developing objective and reproducible clinical rules to help physicians in estimating prognosis. Various proposed tools to estimate prognosis are

**1. Functional ability and nutritional status-** Assessment of functional ability can be the single most predictive factor in most of the malignancy. For example patients with advanced malignancy lose 70-80% of their functional ability in the last 3 months of life.

Diminished functional ability may be documented by either.

1. Karnofsky performance status is less than 50%.

2. Dependence on at least three activity (bathing, dressing, feeding, transfer, continence of urine and stool).
3. Patient spends more than 50% time in bed.
4. progressive weight loss more than 20% in last 3 to 6 months.
5. Serum albumin less than 2.5 gm/dl

With above all symptoms if patient is having dyspnea at rest or delirium then life expectancy is likely to be 3 months.

**2. Common cancer syndromes-** Several common cancer have well documented short median survival times

- Malignant hypercalcemia : 8 weeks (except in cases of newly diagnosed breast cancer and in myeloma)
- Malignant pericardial effusion : 8weeks
- Carcinomatous meningitis: 8-12 weeks
- Multiple brain metastases : 1-2 months without radiation treatment; 3-6 months with radiation.
- Patients with metastatic solid cancer, acute leukemia or high grade lymphoma, who do not receive systemic chemotherapy (for whatever reason) have a median survival of less than 6 months.

1. **Palliative Prognostic Score 2.** It combines objective measures along with the physician's global estimate to predict a more accurate prognosis.

**Palliative Prognosis Score**

Clinical factor	Points
Dyspnoea present	1
Anorexia present	1.5
Karnofsky Performance Scale(KPS) of 10-20	2.5
Clinical prediction of survival (weeks)	
More than 12 weeks	0
11-12	2
7-10	2.5
5-6	4.5
3-4	6
1-2	8.5
Total WBC count (cells per mm <sup>3</sup> )	
Less than 8500	0
8500-11000	1
Greater than 11000	2.5
Lymphocyte percentage	
20 or greater	0
12.0-19.9	1
Less than 12 percent	2.5

**Total Points**

Score	Risk group	Median survival (days)	Probability of 30 days survival(%)
0-5.5	low	76	87
5.6-11	moderate	32	52
11.1-17.5	high	14	17

It is always important to remember that any such score is meant to support decision making, not replace it.

**Conclusion:** Accurate predication of prognosis is important for good clinical decision making in the care of patients with a terminal illness. Physician’s prediction of survival is not very accurate and often over estimate survival. Research is needed to increase the way to enhance the clinical prediction of survival and to find out whether the demographic, training, or experiences of the physicians makes a

difference. If they are better able to anticipate death, they will be likely to be better able to make judicious use of medical treatment and optimize the use of palliative care, avoiding unnecessary treatment near the end of life.

**REFERENCES:**

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2. *Maltoni M, Nanni O, Pirovano M, et al. Successful validation of the palliative prognostic score in terminally ill cancer patients. J Pain Symptom Manage 1999;17:242.*

