

OVARIAN CANCER IN THE ELDERLY

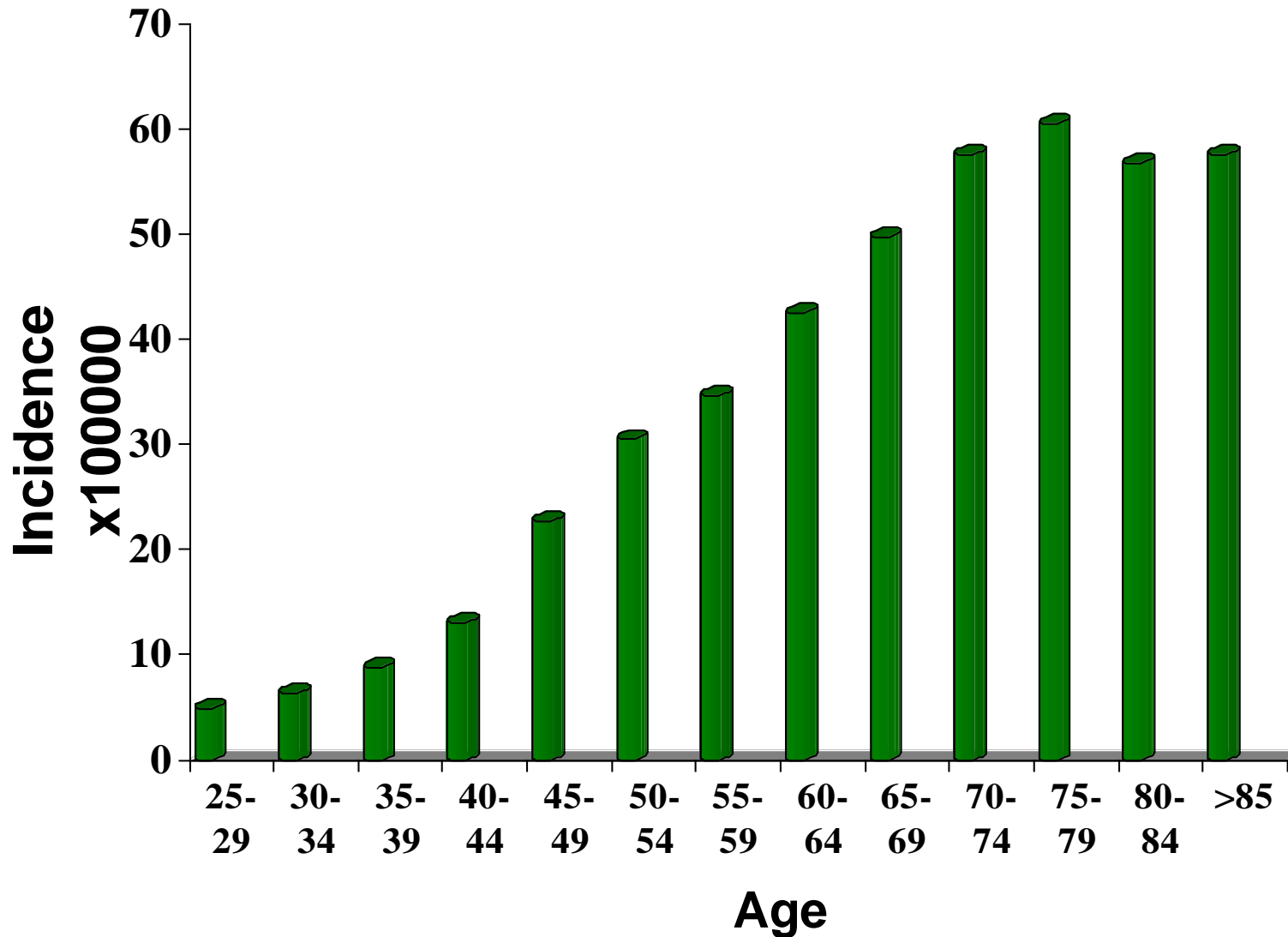
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Why is important a talk on ovarian cancer in the elderly?

- ✓ Female mean age from 83 to 88 years in the female in the 2050
- ✓ Today 1 out of 5 people are > 65 years
- ✓ In the 2030 1 out of 4
- ✓ Today 1 out of 50 people are > 85 years
- ✓ In the 2030 1 out of 20

Incidence of OC

Age-specific rates, 1994-98



Why elderly patients with OC have a poor prognosis?

- ✓ Bad patient selection
- ✓ More advanced stage at diagnosis
- ✓ Poor surgery
- ✓ Less chemotherapy

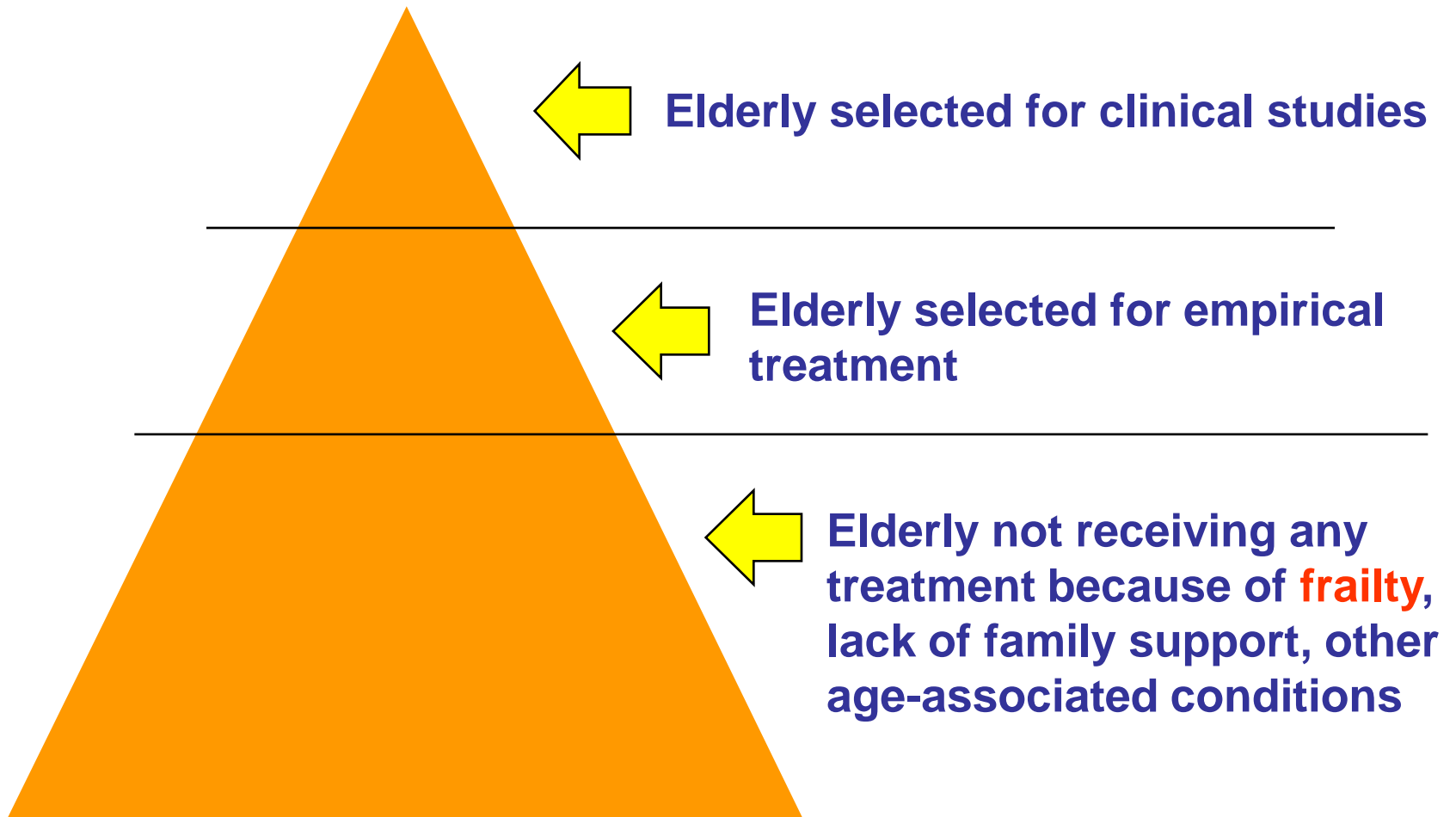
Chronological age is not able to define correctly biological age:

- Old age/frail
- Performance Status
- Comorbidities
(diabetes, hypertension...)
- Multidimensional geriatric
assessment



Is the same treatment standard for all patients with ovarian cancer?

Treatment of elderly cancer patients: we probably only know the tip of the iceberg, frail are in the base



An operational definition of frailty for the Elderly Cancer Patient

What defines a frail patient?

- Dependence in one or more ADL
- 3 or more comorbidities (CIRS)
- Presence of one or more geriatric syndromes

Who are Elderly Frail Cancer Patients?

(The operational concept of aging in Medical Oncology)

They are those with age-associated conditions interfering with treatment and possibly leading to no treatment and barriers to trials entry such as:

- associated diseases
- functional status impairment
- mental deterioration and depression
- lack of family and social support

How to measure these age-associated conditions?

The basic components of the Comprehensive Geriatric Assessment(CGA)

1. Functional status ADL (Activity of Daily Living), IADL (Instrumental Activity of Daily Living)
2. Comorbidity (number, type and rating of comorbid conditions)
3. Cognition (Mini-Mental Status Examination)
4. Depression (Geriatric Depression Scale)
5. Polypharmacy
6. Nutrition (Mini-Nutritional Assessment)
7. Presence of Geriatric Syndromes (dementia, delirium, depression, failure to thrive, neglect or abuse, osteoporosis, falls, incontinence)
8. Socio-economic factors

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Optimal cytoreduction at primary surgery

- ❖ Only 25 % of the patients receive optimal debulking
(vs 50-75 % young adults)
- ❖ Often surgery not performed even when no significant comorbidities present

Cloven NG, et al. *Gynecol Oncol*, 1999

Treatment patterns by decade of life in elderly women (≥ 70 years of age) with ovarian cancer[☆]

Denise Uyar^a, Heidi E. Frasure^b, Maurie Markman^c, Vivian E. von Gruenigen^{b,*}

Table 2
Surgical cytoreduction by age group

	Group 1 (age 70–79) <i>n</i> = 90 (%)	Group 2 (age 80+) <i>n</i> = 41 (%)	<i>P</i> value ^a
Surgery			
Yes	80 (89)	25 (61)	0.002
No	10 (11)	16 (39)	
Optimal debulking			
Yes	64/80 (80)	20/25 (80)	0.999
No	16/80 (20)	5/25 (20)	

^a Chi-square test for comparison between age groups.



ELSEVIER

Prognostic factors for complete debulking in advanced ovarian cancer and its impact on survival. An exploratory analysis of a prospectively randomized phase III study of the Arbeitsgemeinschaft Gynaekologische Onkologie Ovarian Cancer Study Group (AGO-OVAR)[☆]

Pauline Wimberger^{a,*}, Nils Lehmann^b, Rainer Kimmig^a, Alexander Burges^c,
Werner Meier^d, Andreas Du Bois^e
for the AGO-OVAR

Odds ratio estimates: multivariable logistic regression modeling analyzing parameters associated with complete resection

Parameter	Odds ratio	95% Confidence limits	<i>p</i> -Value
Age (10 years)	0.78	0.65 0.94	0.008
FIGO IIIB–IV vs. IIB–IIIA	0.25	0.15 0.42	<0.0001
ECOG > 0 vs. 0	0.57	0.39 0.84	0.005
Peritoneal carcinomatosis: yes vs. no	0.15	0.09 0.23	<0.0001
Increasing pre-op tumor diameter (per 1-cm intervals)	0.28	0.15 0.52	<0.0001

Survival Effect of Maximal Cytoreductive Surgery for Advanced Ovarian Carcinoma During the Platinum Era: A Meta-Analysis

By Robert E. Bristow, Rafael S. Tomacruz, Deborah K. Armstrong, Edward L. Trimble, and F.J. Montz

Table 2. Multiple Linear Regression Analysis

Variable	Change in Median Survival Time		95% CI or CL	P
	%	Increase		
Percent maximal cytoreduction	5.5	10%	3.3-7.8	< .001
Year of publication	2.8	1 year	0.9-4.6	.004
Platinum dose-intensity	0.8	10%	-0.7, 2.3	.911
Cumulative platinum dose	1.4	1 U	-1.9, 4.7	.377
Percent stage IV disease	-2.2	10%	-8.5, 4.1	.495
Median age	-0.9	1 year	-3.1, 1.2	.371

Abbreviations: CI, confidence interval; CL, confidence limits.

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Chemotherapy for ovarian cancer according to age

Age	% receiving CT
< 60	82
60-79	60
> 80	40

Hightower Cancer 1993

Chemotherapy for ovarian cancer according to age

Age	% receiving CT	Odds Ratio
65-69	88	1.00
70-74	85	0.96
75-79	82	0.65
80-84	67	0.24
85+	43	0.12

Sundarajyan J Clin Oncol 2002

Which is the standard chemo for elderly pts with OC?

- ✓ Carbo-taxol?
- ✓ Carbo alone
- ✓ Others

Treatment patterns by decade of life in elderly women
(≥ 70 years of age) with ovarian cancer[☆]

Denise Uyar^a, Heidi E. Frasure^b, Maurie Markman^c, Vivian E. von Gruenigen^{b,*}

Grade 3/4 hematologic toxicity

	Age 70–79	Age 80+	<i>P</i> value ^a
Taxane/Platinum	37/78 (47)	15/19 (79)	0.006
Carboplatinum	2/11 (18)	5/20 (25)	0.99
Toxicity requiring hospitalization	15/90 (17)	9/41 (23)	0.632

^a Chi-square test for frequency distribution between groups.

Feasibility, toxicity and quality of life of first-line chemotherapy with platinum/paclitaxel in elderly patients aged ≥ 70 years with advanced ovarian cancer—a study by the AGO OVAR Germany

F. Hilpert^{1*}, A. du Bois², E. R. Greimel³, J. Hedderich⁴, G. Krause¹, L. Venhoff¹, S. Loibl⁵ & J. Pfisterer^{1,6}

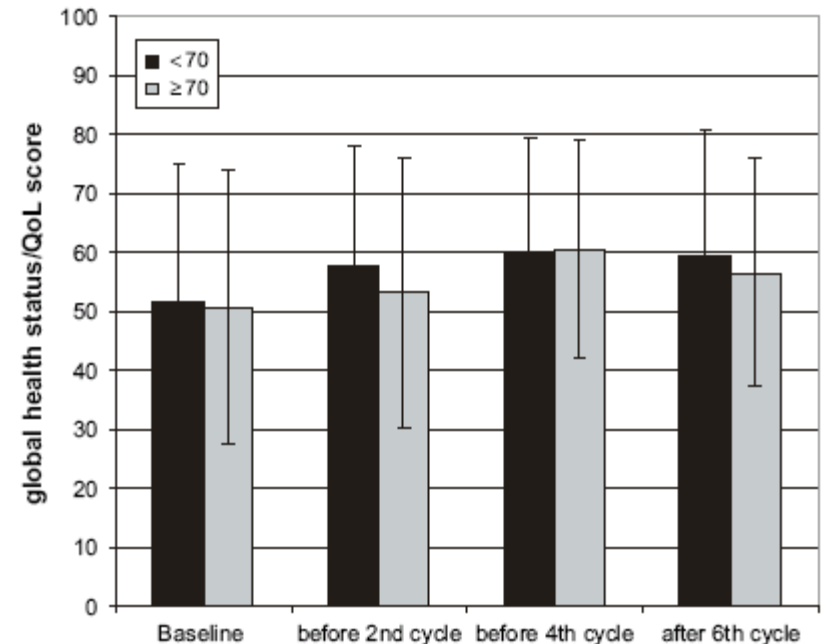
	<70 years, 676 patients		≥ 70 years, 103 patients		<i>P</i> value
	<i>n</i>	%	<i>n</i>	%	
Cycles					<0.001
1–4	64	10	24	23	
5–6	612	90	79	77	
Early discontinuation	86	13	27	26	<0.001
Reasons for early discontinuation ^a					
Patients' withdrawal	17	3	10	10	<0.001
Toxicity	54	8	20	19	<0.001
Progressive disease	19	3	2	2	0.612
Death	8	1	1	<1	0.851
Others	1	<1	0	0	0.696

Feasibility, toxicity and quality of life of first-line chemotherapy with platinum/paclitaxel in elderly

Possible Bias

- Mean age 56 years (expected 63)
- Selected for a phase III trial

CTC	n	%	n	%	
Anemia					0.257
1/2	554	83	87	87	
3/4	32	5	6	6	
Leucopenia					0.490
1/2	380	57	53	53	
3/4	32	21	26	26	
Neutropenia					0.186
1/2	205	32	25	26	
3/4	183	28	37	37	
Thrombocytopenia					0.344
1/2	211	32	38	38	
3/4	46	7	8	8	
Febrile neutropenia					<0.001
3/4	5	<1	5	5	



Conclusions

- ✓ Undertreatment based on age is not justified
- ✓ Better definition of elderly patients for surgery and chemotherapy (geriatric assessment)
- ✓ Research urgently needed
- ✓ Cooperation within groups