Ente Ospedaliero Cantonale

Prognosi dei pazienti con tumore

17° corso di aggiornamento per il medico di base

26 settembre 2019

Vittoria Espeli vittoria.espeli@eoc.ch

Outline

- Il cancro in numeri
- Diagnosi
- Trattamento
- Sopravvivenza

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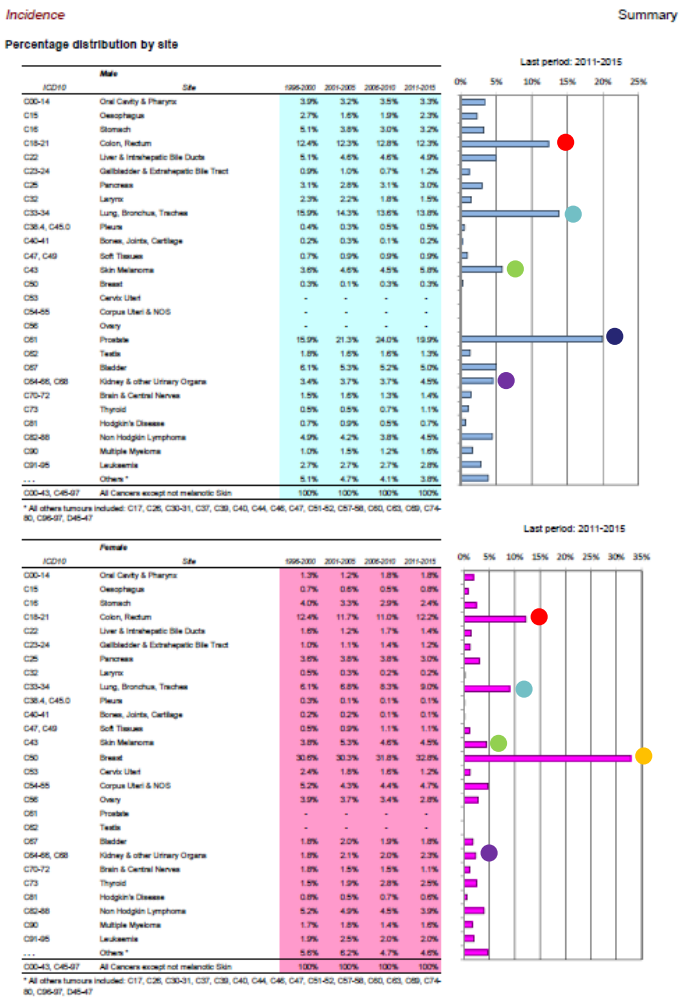
Il cancro in numeri

	PRIMA	DOPO
Diagnosi di tumore nel mondo	14 Mio/anno nel 2012	22 Mio/anno nel 2032
Diagnosi di tumore in USA	1.7 Mio nel 2017	2.2 Mio nel 2030
Adulti sopravvivenza a 5 anni	50% negli anni ‘70	70% oggi
Bambini sopravvivenza a 5 anni	60% negli anni ‘70	80% oggi
Diagnosi di tumore in CH *	38500 nel 2012	42000 nel 2015
Sopravvivenza a 5 anni in CH *	55% negli anni ‘90	65% oggi

* Ufficio federale di statistica UST, 2016.

Incidenza 2011 - 2015


Incidence Summary

Percentage distribution by site

Male

ICD10	Site	1996-2000	2001-2005	2006-2010	2011-2015
C00-14	Oral Cavity & Pharynx	3.9%	3.2%	3.5%	3.3%
C15	Oesophagus	2.7%	1.6%	1.9%	2.3%
C16	Stomach	5.1%	3.8%	3.0%	3.2%
C18-21	Colon, Rectum	12.4%	12.3%	12.8%	12.3%
C22	Liver & Intrahepatic Bile Ducts	5.1%	4.6%	4.6%	4.9%
C23-24	Gallbladder & Extrahepatic Bile Tract	0.9%	1.0%	0.7%	1.2%
C25	Pancreas	3.1%	2.8%	3.1%	3.0%
C32	Larynx	2.3%	2.2%	1.8%	1.5%
C33-34	Lung, Bronchus, Trachea	15.9%	14.3%	13.6%	13.8%
C38.4, C45.0	Pleura	0.4%	0.3%	0.5%	0.5%
C40-41	Bones, Joints, Cartilage	0.2%	0.3%	0.1%	0.2%
C47, C49	Soft Tissues	0.7%	0.9%	0.9%	0.9%
C43	Skin Melanoma	3.6%	4.6%	4.5%	5.8%
C50	Breast	0.3%	0.1%	0.3%	0.3%
C53	Cervix Uteri	-	-	-	-
C54-55	Corpus Uteri & NOS	-	-	-	-
C56	Ovary	-	-	-	-
C61	Prostate	15.9%	21.3%	24.0%	19.9%
C62	Testis	1.8%	1.6%	1.6%	1.3%
C67	Bladder	6.1%	5.3%	5.2%	5.0%
C64-66, C68	Kidney & other Urinary Organs	3.4%	3.7%	3.7%	4.5%
C70-72	Brain & Central Nerves	1.5%	1.6%	1.3%	1.4%
C73	Thyroid	0.5%	0.5%	0.7%	1.1%
C81	Hodgkin's Disease	0.7%	0.9%	0.5%	0.7%
C82-88	Non Hodgkin Lymphoma	4.0%	4.2%	3.8%	4.5%
C90	Multiple Myeloma	1.0%	1.5%	1.2%	1.6%
C91-95	Leukaemia	2.7%	2.7%	2.7%	2.8%
...	Others *	5.1%	4.7%	4.1%	3.8%
C00-43, C45-97	All Cancers except not melanotic Skin	100%	100%	100%	100%

* All others tumours included: C17, C26, C30-31, C37, C39, C40, C44, C46, C47, C51-52, C57-58, C60, C63, C69, C74-80, C96-97, D45-47

Last period: 2011-2015

0% 5% 10% 15% 20% 25%

Female

ICD10	Site	1996-2000	2001-2005	2006-2010	2011-2015
C00-14	Oral Cavity & Pharynx	1.3%	1.2%	1.8%	1.8%
C15	Oesophagus	0.7%	0.6%	0.5%	0.8%
C16	Stomach	4.0%	3.3%	2.9%	2.4%
C18-21	Colon, Rectum	12.4%	11.7%	11.0%	12.2%
C22	Liver & Intrahepatic Bile Ducts	1.6%	1.2%	1.7%	1.4%
C23-24	Gallbladder & Extrahepatic Bile Tract	1.0%	1.1%	1.4%	1.2%
C25	Pancreas	3.6%	3.8%	3.8%	3.0%
C32	Larynx	0.5%	0.3%	0.2%	0.2%
C33-34	Lung, Bronchus, Trachea	6.1%	6.8%	8.3%	9.0%
C38.4, C45.0	Pleura	0.3%	0.1%	0.1%	0.1%
C40-41	Bones, Joints, Cartilage	0.2%	0.2%	0.1%	0.1%
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C50	Breast	30.6%	30.3%	31.8%	32.8%
C53	Cervix Uteri	2.4%	1.8%	1.6%	1.2%
C54-55	Corpus Uteri & NOS	5.2%	4.3%	4.4%	4.7%
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Last period: 2011-2015

0% 5% 10% 15% 20% 25% 30% 35%

Registro Tumori Cantone Ticino
Centro Programma Screening Ticino

3

Repubblica e Cantone Ticino

	♂	♀
- Tumore mammario		32.8%
- Tumore prostatico	19.9%	
- Tumore colon-retto	12.3%	12.2%
- Tumore polmonare	13.8%	9%
- Melanoma	5.8%	4.5%
- Tumore renale	4.5%	2.3%

Registro cantonale dei tumori. Incidenza dei tumori nel Canton Ticino. 1996 – 2015.

https://www4.ti.ch/dss/dsp/icp/registro-cantonale-dei-tumori/home/

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- Il cancro in numeri
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Diagnosi

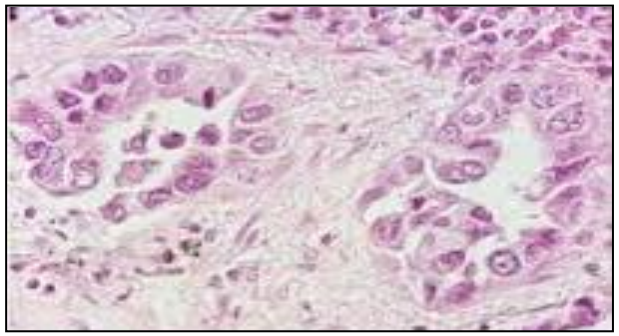
1. Diagnosi istologica
2. Immunoistochimica
3. Biologia molecolare
4. Genomica
5. Biopsie liquide

Diagnosi

1. Diagnosi istologica

→ definisce l'origine istogenetica del tumore

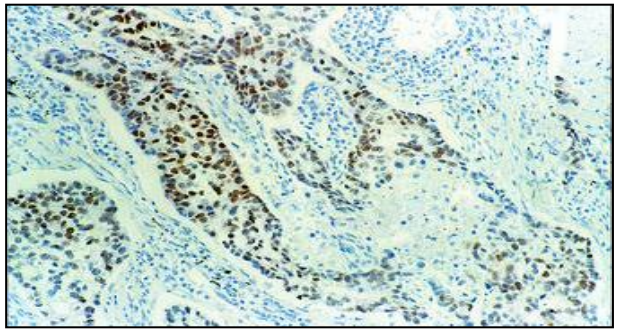
Esempio: adenocarcinoma



2. Immunoistochimica

→ determina il sito d'origine del tumore

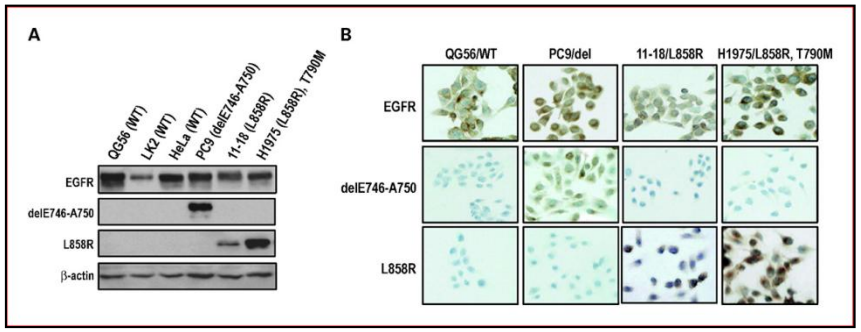
Esempio: anticorpo TTF1 per polmone



3. Biologia molecolare

→ individua il profilo molecolare del tumore

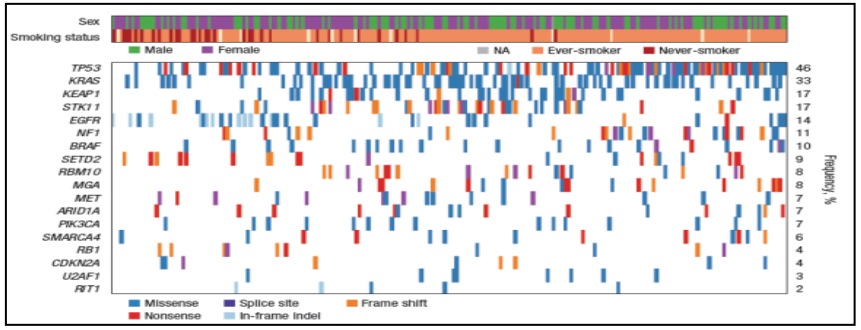
Esempio: mutazione EGFR nel tumore polmonare



4. Genomica

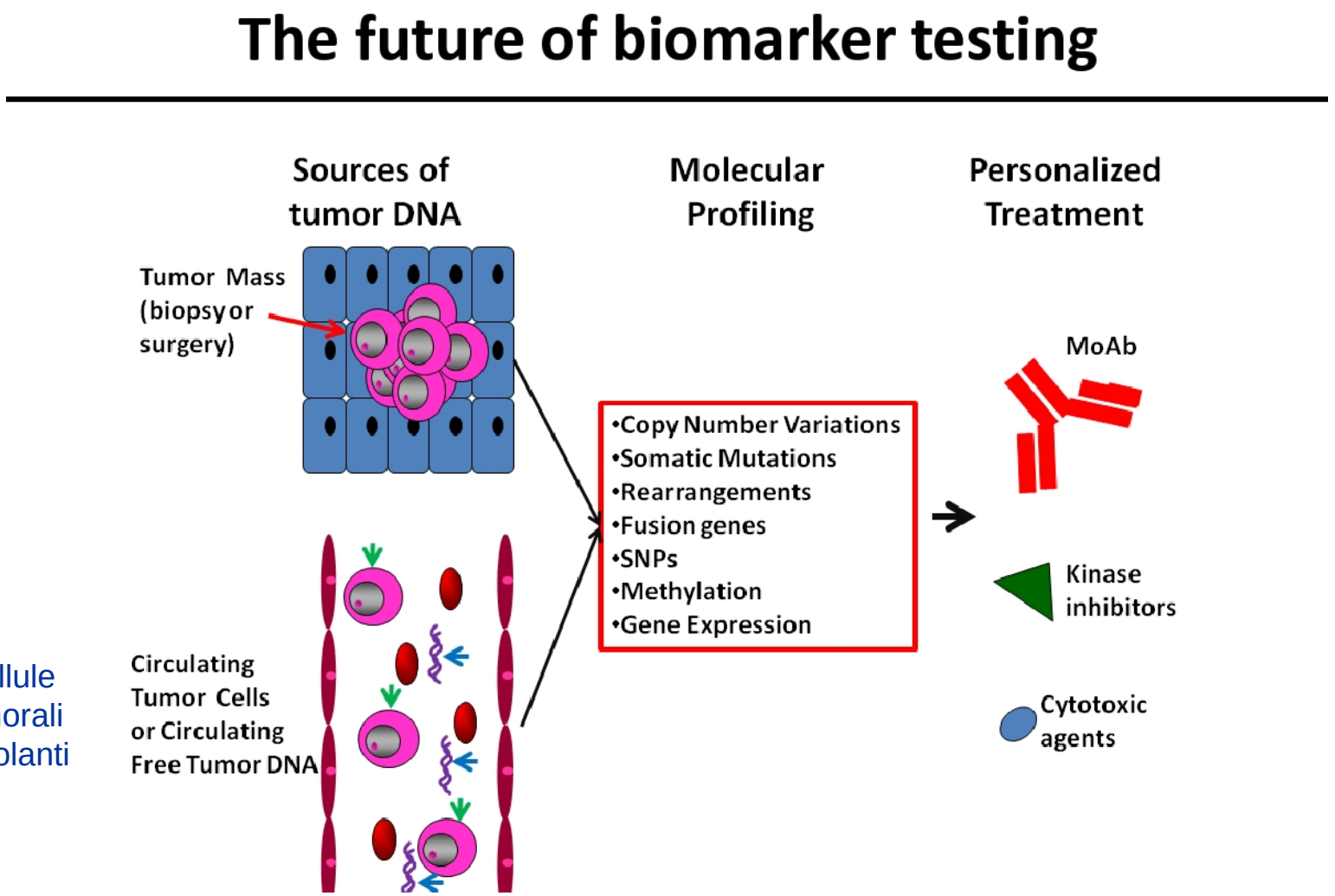
→ Individua dei pannelli di alterazioni genetiche

Esempio: sequenziamento del DNA tumorale



Biesecker, NEJM, 2014.

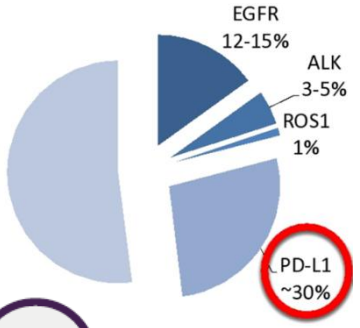
Diagnosi: «biopsie liquide»



Cellule tumorali circolanti

Normanno, J Cell Biochem, 2013.

Tumore al polmone
modello di medicina personalizzata



EGFR-TK positive
ALK positive
ROS-1 positive
PD-L1 <50%
No gene mutation or fusion protein
PD-L1 ≥50%
Pembrolizumab combination (TA557)
Afatinib (TA310) or Erlotinib (TA258) or Gefitinib (TA192)
Crizotinib (TA529)
Pembrolizumab (TA531)
T790M positive?
N
Y
Osimertinib (TA416)
Ceritinib (TA500)
Alectinib (TA536)
Crizotinib (TA406)
Brigatinib (TA571)
Ceritinib (TA395)
Disease progression
Cancer Drugs Fund
* This combination/some of these combinations of drugs do not have a UK marketing authorisation for this indication
Platinum doublet chemotherapy* (when using Pemetrexed+Cisplatin as first-line treatment see TA181)
Pemetrexed+ Carboplatin*
Platinum doublet chemotherapy*
Pemetrexed+ Carboplatin*
Pemetrexed maintenance (TA402 or TA190)
Pemetrexed maintenance (TA402 or TA190)
Atezolizumab (no PD-L1 expression needed) (TA520)
Nivolumab (if PD-L1 >1%) (TA484)
Pembrolizumab (if PD-L1 >1%) (TA428)
Docetaxel +/- Nintedanib (TA347)
Docetaxel +/- Nintedanib (TA347)

Nicer reccomendations, 2019.

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Table 1. FDA Approvals of Cancer Therapies From November 1, 2016, to October 31, 2017

Drug	Indication
New approval	
Rucaparib (Rubraca; Clovis Oncology, Boulder, CO)	For treatment of patients with deleterious BRCA mutation (germline and/or somatic)–associated advanced ovarian cancer who have been treated with two or more chemotherapies.
Avelumab (Bavencio; EMD Serono, Darmstadt, Germany)	For the treatment of patients ≥ 12 years of age with metastatic Merkel cell carcinoma. Avelumab is a PD-L1–blocking human immunoglobulin G1λ monoclonal antibody. This is the first FDA-approved product to treat this type of cancer.
Niraparib (Zejula; Tesaro, Waltham, MA)	Maintenance treatment for adult patients with recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in complete or partial response to platinum-based chemotherapy.
Ribociclib (Kisqali; Novartis, Basel, Switzerland)	In combination with an aromatase inhibitor as initial endocrine-based therapy for the treatment of postmenopausal women with HR-positive, HER2-negative advanced or metastatic breast cancer.
Brigatinib (Alunbrig; Takeda, Osaka, Japan)	For treatment of patients with metastatic anaplastic lymphoma kinase–positive NSCLC who experienced disease progression on or who are intolerant to crizotinib.
Midostaurin (Rydapt; Novartis)	For treatment of adult patients with newly diagnq mutation–positive, as detected by an FDA-approv standard cytarabine and daunorubicin induction a
Durvalumab (Imfinzi; AstraZeneca, London, United Kingdom)	For treatment of patients with locally advanced o carcinoma who experience disease progressior containing chemotherapy or who experience di months of neoadjuvant or adjuvant treatment v chemotherapy.
Rituximab and hyaluronidase human (Rituxan Hycela; Genentech, South San Francisco, CA)	For adult patients with follicular lymphoma, diffuse chronic lymphocytic leukemia.
Neratinib (Nerlynx; Puma Biotechnology, Los Angeles, CA)	For extended adjuvant treatment of adult patients overexpressed/amplified breast cancer, to follo based therapy.
Daunorubicin and cytarabine (Vyxeos; Jazz Pharmaceuticals, Palo Alto, CA)	For treatment of adults with newly diagnosed thera myelodysplasia-related changes, two types of A prognosis.
Enasidenib (Idhifa; Celgene, San Francisco, CA)	For treatment of adult patients with relapsed or r isocitrate dehydrogenase-2 mutation as detecte
Inotuzumab ozogamicin (Besponsa; Wyeth, Madison, NJ)	For treatment of adults with relapsed or refractor
Tisagenlecleucel (Kymriah; Novartis)	For treatment of patients ≤ 25 years of age with refractory or in second or later relapse.
Abemaciclib (Verzenio; Eli Lilly, Indianapolis, IN)	In combination with fulvestrant for women with H advanced or metastatic breast cancer with dise endocrine therapy.
Bevacizumab-awwb (Mvasi; Amgen, South San Francisco, CA)	Approved as a biosimilar to bevacizumab (Avastin first biosimilar approved in the United States fo
Copanlisib (Aliqopa; Bayer HealthCare, Berlin, Germany)	For treatment of adult patients with relapsed folli received at least two prior systemic therapies.
Gemtuzumab ozogamicin (Mylotarg; Pfizer, New York, NY)	Newly diagnosed CD33-positive AML in adults and refractory CD33-positive AML in adults and pe age. May be used in combination with daunorub with newly diagnosed AML or as a stand-alone t pediatric patients.
Axicabtagene ciloleucel (Yescarta; Kite Pharma, Los Angeles, CA)	For treatment of adult patients with relapsed or r lymphoma after two or more lines of systemic
New use	
Daratumumab (Darzalex; Janssen, Beerse, Belgium)	In combination with lenalidomide and dexamethasone, or bortezomib and dexamethasone, for the treatment of patients with multiple myeloma who have received at least one prior therapy.
Nivolumab (Opdivo; Bristol-Meyers Squibb, New York, NY)	Recurrent or metastatic squamous cell carcinoma of the head and neck with disease progression on or after a platinum-based therapy.
Lenalidomide (Revlimid; Celgene)	Maintenance therapy for patients with multiple myeloma after autologous stem-cell transplantation.
Nivolumab (Opdivo)	For treatment of patients with locally advanced or metastatic urothelial carcinoma who experience disease progression during or after platinum-containing chemotherapy or experience disease progression within 12 months of neoadjuvant or adjuvant treatment with a platinum-containing chemotherapy.
Osimertinib (Tagrisso; AstraZeneca)	For treatment of patients with metastatic EGFR T790M mutation–positive NSCLC, as detected by an FDA-approved test, who experienced disease progression on or after EGFR tyrosine kinase inhibitor therapy.
Palbociclib (Ibrance; Pfizer)	HR-positive, HER2-negative advanced or metastatic breast cancer in combination with an aromatase inhibitor as initial endocrine-based therapy in postmenopausal women.
Pembrolizumab (Keytruda; Merck & Co, Kenilworth, NJ)	For treatment of adult and pediatric patients with refractory classic Hodgkin lymphoma or those who have experienced relapse after three or more prior lines of therapy.
Regorafenib (Stivarga; Bayer HealthCare Pharmaceuticals)	For treatment of patients with HCC who have been previously treated with sorafenib.
Avelumab (Bavencio)	For patients with locally advanced or metastatic urothelial carcinoma who experienced disease progression during or after platinum-containing chemotherapy or within 12 months of neoadjuvant or adjuvant platinum-containing chemotherapy.
Pembrolizumab (Keytruda)	In combination with pemetrexed and carboplatin for treatment of patients with previously untreated metastatic nonsquamous NSCLC.
Pembrolizumab (Keytruda)	For patients with locally advanced or metastatic urothelial carcinoma who experience disease progression during or after platinum-containing chemotherapy or within 12 months of neoadjuvant or adjuvant treatment with platinum-containing chemotherapy.
Nivolumab (Opdivo)	For treatment of HCC in patients who have been previously treated with sorafenib.
Pembrolizumab (Keytruda)	For patients with recurrent locally advanced or metastatic, gastric, or gastroesophageal junction adenocarcinoma whose tumors express PD-L1 as determined by an FDA-approved test.

30 nuovi ttt
approvati dall'FDA

29 non chemio!

Heymach, JCO 2018.

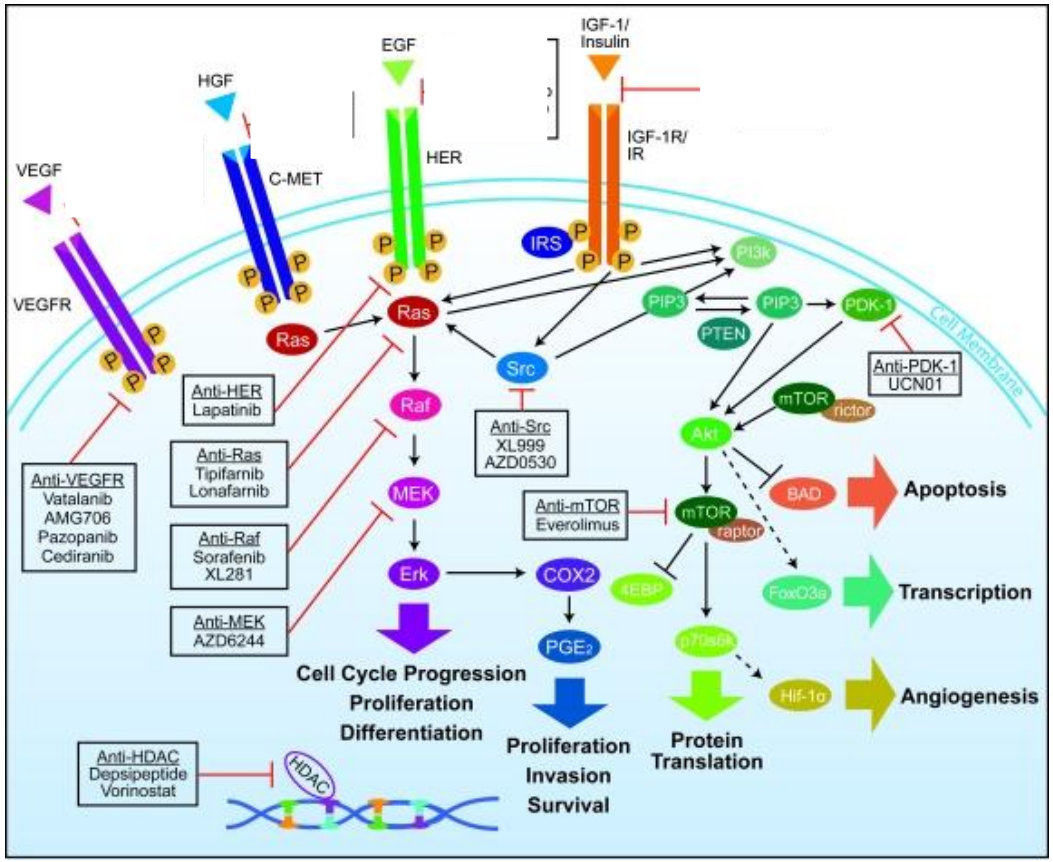
Trattamento

1. Terapie a bersaglio molecolare e anticorpi
2. Inibitori dei checkpoint immunitari
3. Immunoterapia adottiva antitumorale (car-T)
4. Terapie agnostiche

1. Terapie a bersaglio molecolare

«targeted therapy»

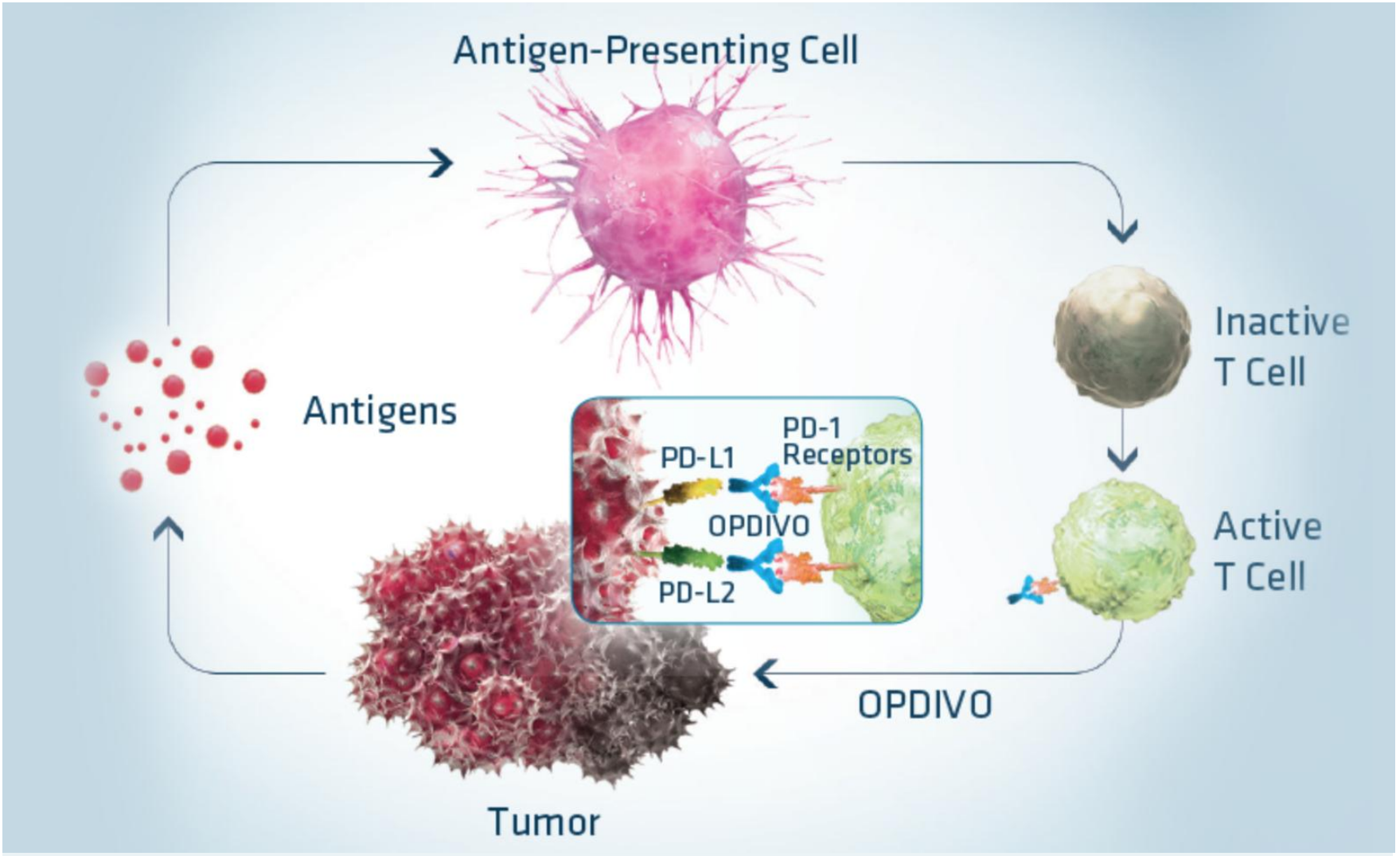
- Interferiscono con specifiche molecole necessarie per la crescita cellulare.



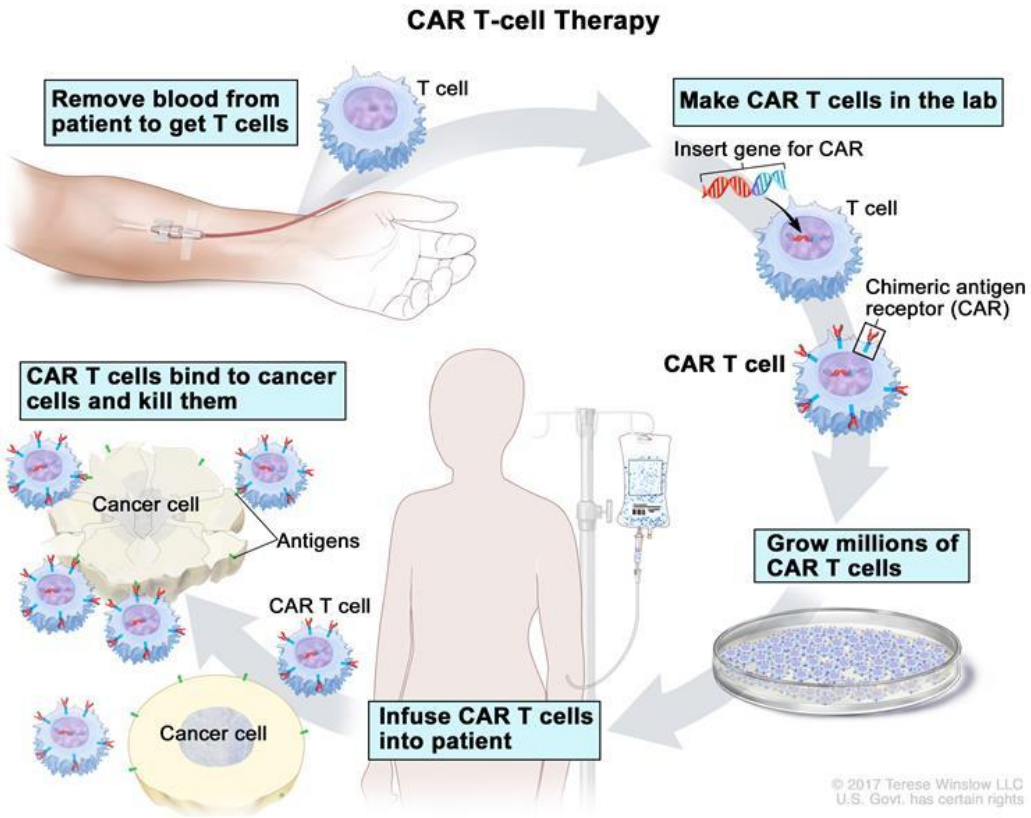
anticorpi monoclonali

piccole molecole che agiscono all'interno della cellula

2. Inibitori dei checkpoint immunitari



3. Immunoterapia adottiva antitumorale



Le **cellule T** del paziente vengono **modificate geneticamente**

Viene inserito artificialmente un gene nella cellula T

Le cellule sono moltiplicate in laboratorio

Le **cellule T modificate** esprimono recettori che **riconoscono gli antigeni tumorali**

Si iniettano una volta perché continuano a moltiplicarsi nel corpo con un effetto immunitario persistente

4. Terapie agnostiche

- Le terapie oncologiche si basano su origine e stadio del tumore
- Queste invece sono basate su alterazioni geniche non tessuto-specifiche

- 2 terapie approvate in USA:
  - Immunoterapico pembrolizumab per tumori con deficienza del meccanismo di riparazione del DNA mismatch-repair (MMR)
  - Terapia a bersaglio molecolare larotrectinib per tumori con alterazione del gene TRK

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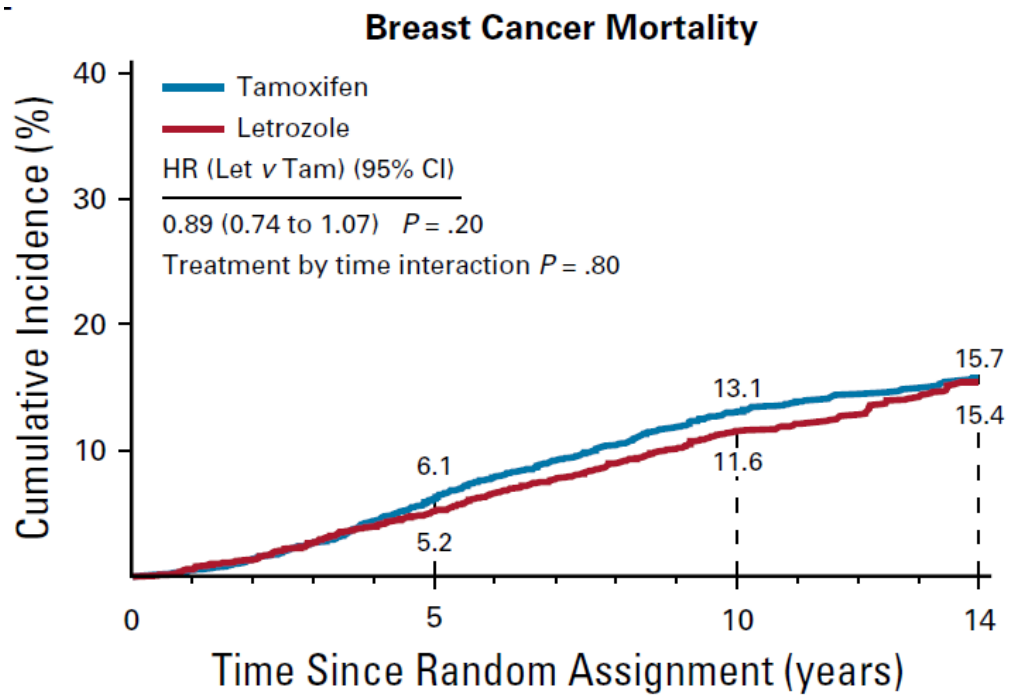
Sopravvivenza tumore mammario Non metastatico

Terapia ormonale adiuvante

5ys OS **95%**

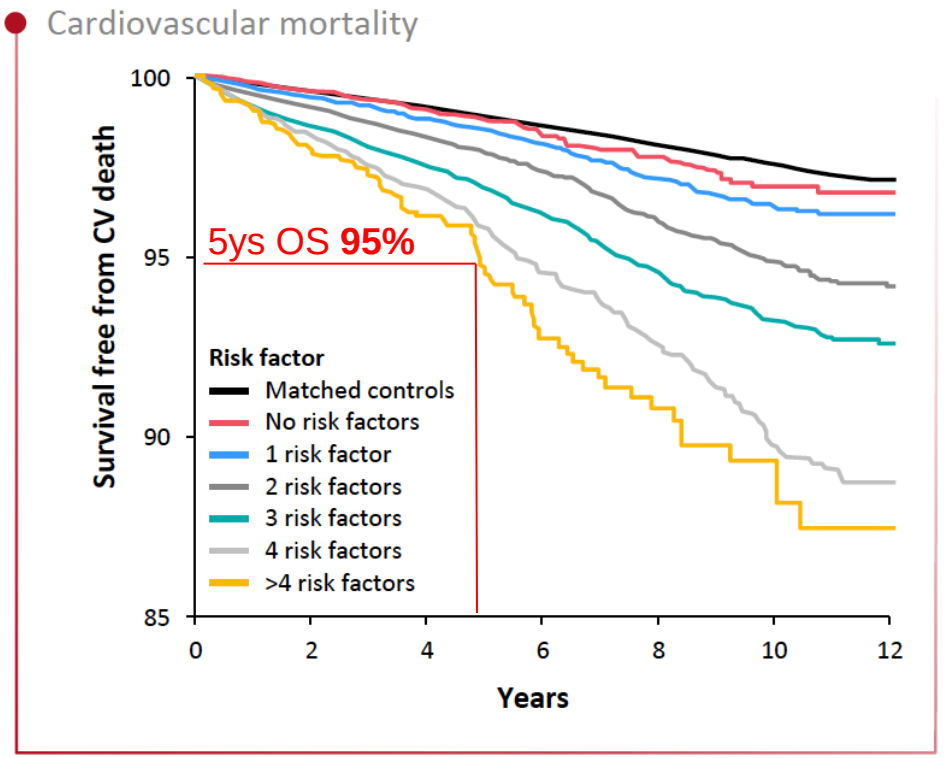


Ruhstaller, JCO 2018.

Sopravvivenza post infarto miocardico

SWEDEHEART: Risk factor control after MI and prognosis

- SWEDEHEART - nationwide registry of post MI patients
- 6 risk factors: physical activity, blood pressure, obesity, smoking, Hba1c and LDL
- MI patients with no risk factors had the same risk of outcome as controls
- Physical inactivity and continued smoking strongest predictors of outcomes
- **Conclusion:** lifestyle remains at the core of preventing CVD events



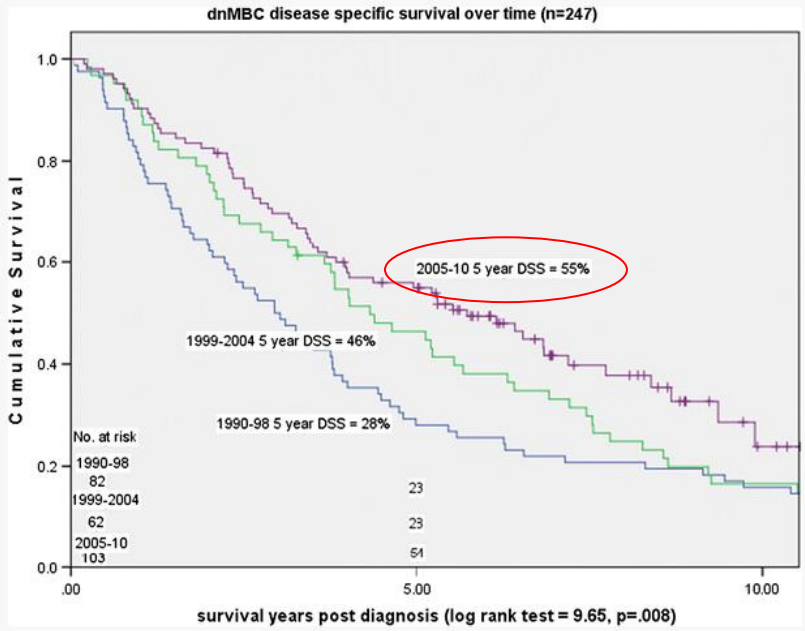
E. Hagstrom, Late Breaking Science in Prevention 2, FP 5117

Hagtrom, Poster 5117.

Sopravvivenza tumore mammario Metastatico

Secondo periodo storico

5ys OS **55%**



Malmgren, Breast canc res 2018.

Antiormonale + CDK4/6

3.5ys OS **70%**

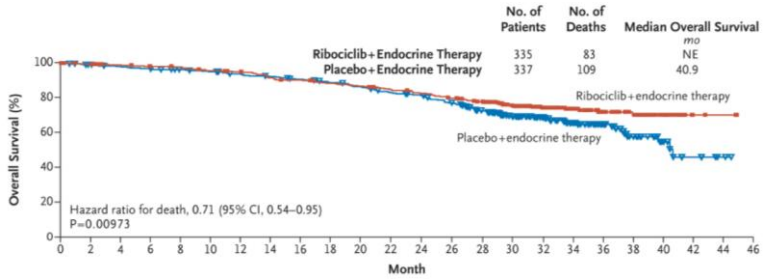
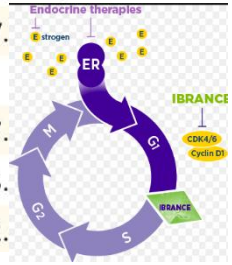


Table 1. Overall Survival

Variable	Ribociclib Group (N=335)	Placebo Group (N=337)
Deaths — no. (%)†	83 (24.8)	109 (32.3)
Data censored‡	252 (75.2)	228 (67.7)
Median overall survival –	NE	40.9 (37.
Kaplan–Meier estimated		
24 mo	82.7 (78.1–86.5)	81.8 (77.
36 mo	71.9 (66.0–77.0)	64.9 (58.
42 mo	70.2 (63.5–76.0)	46.0 (32.



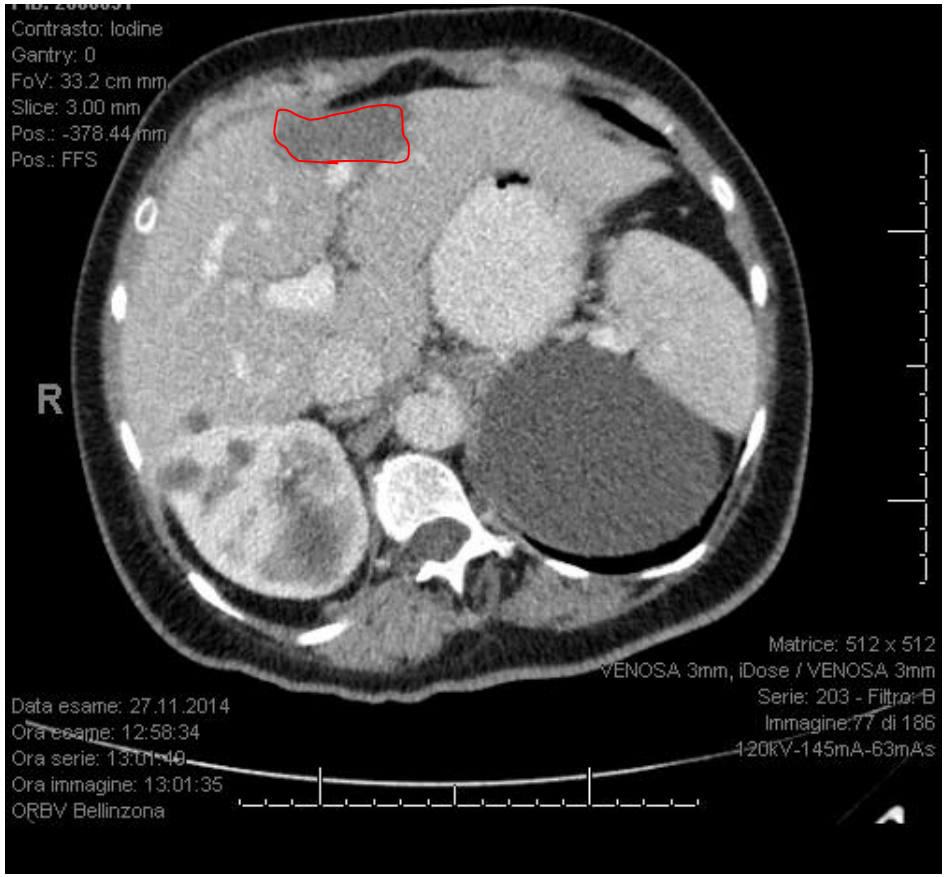
Seock-Ah Im, NEJM 2019.

Mammario metastatico

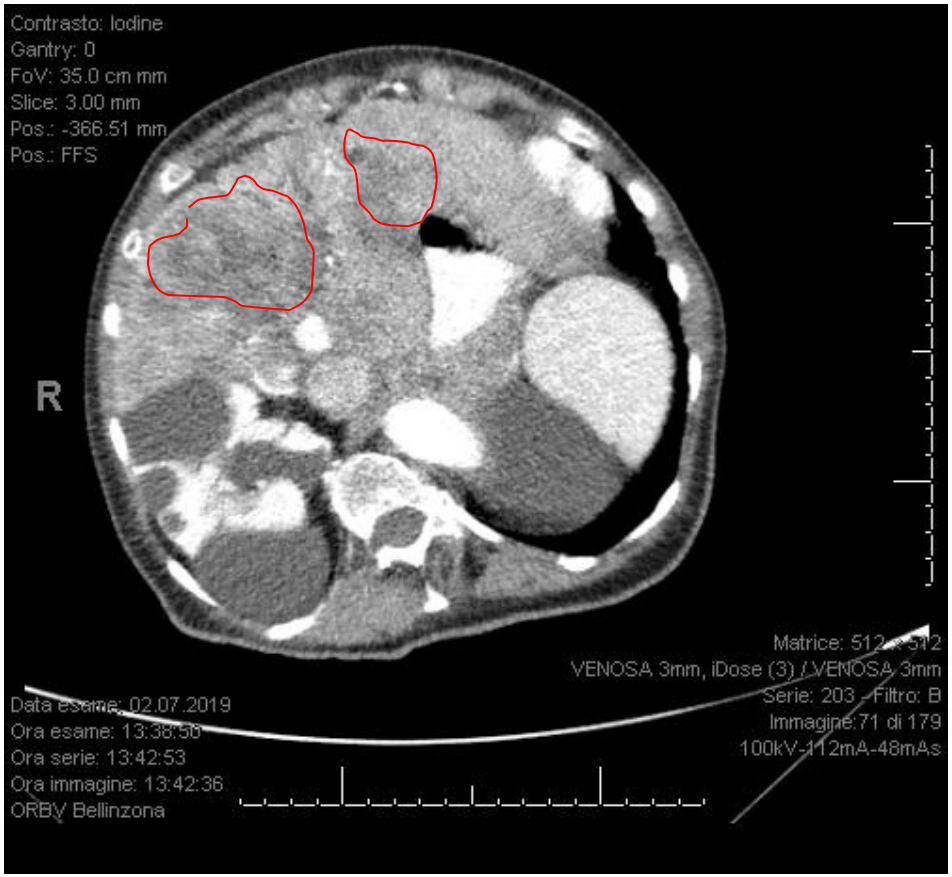
60 anni

Ormono e chemio-terapia

Controllo di malattia a 5 anni



2014

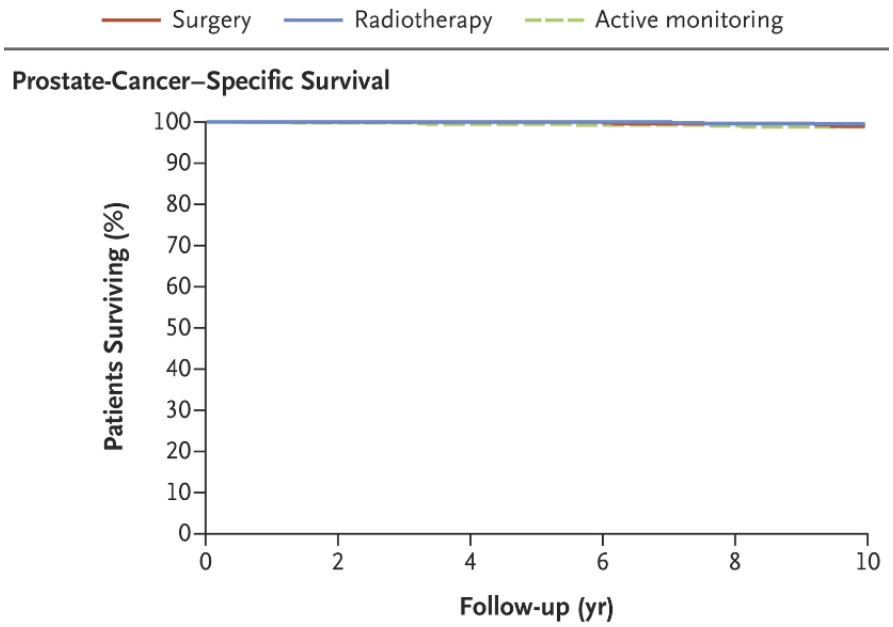


2019

Sopravvivenza tumore prostatico

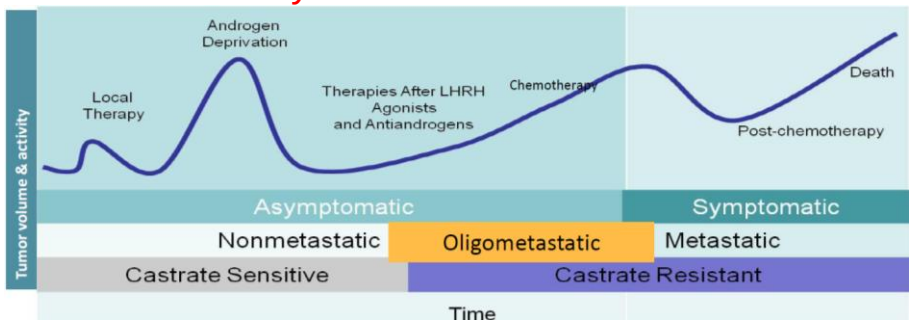
Tumore localizzato

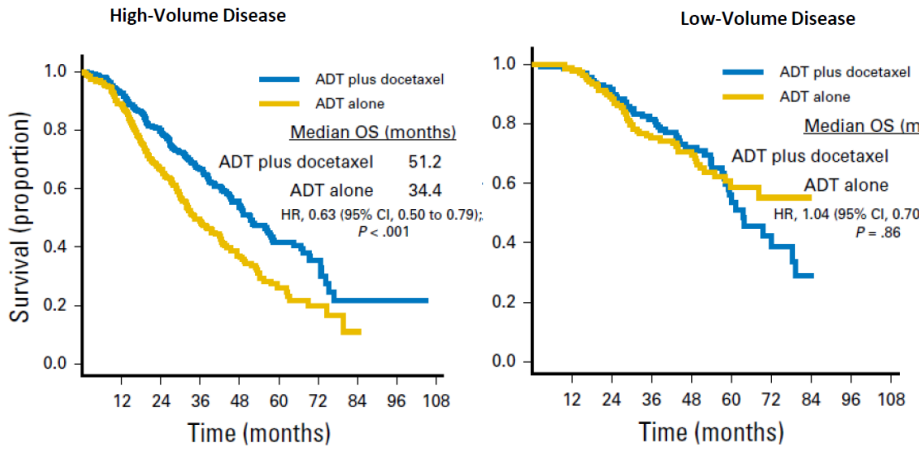
5ys OS **98%**



Tumore metastatico

5ys OS **50%-60%**





Hamdy, NEJM 2016.

Kyriakopoulos, JCO 2018.

♂ 85 anni

Terapie ormonali

Denosumab

Diagnosi 20 anni fa

Prostata metastatico

Adenocarcinoma della prostata localizzato, 1999.

Prima recidiva nel 2009.

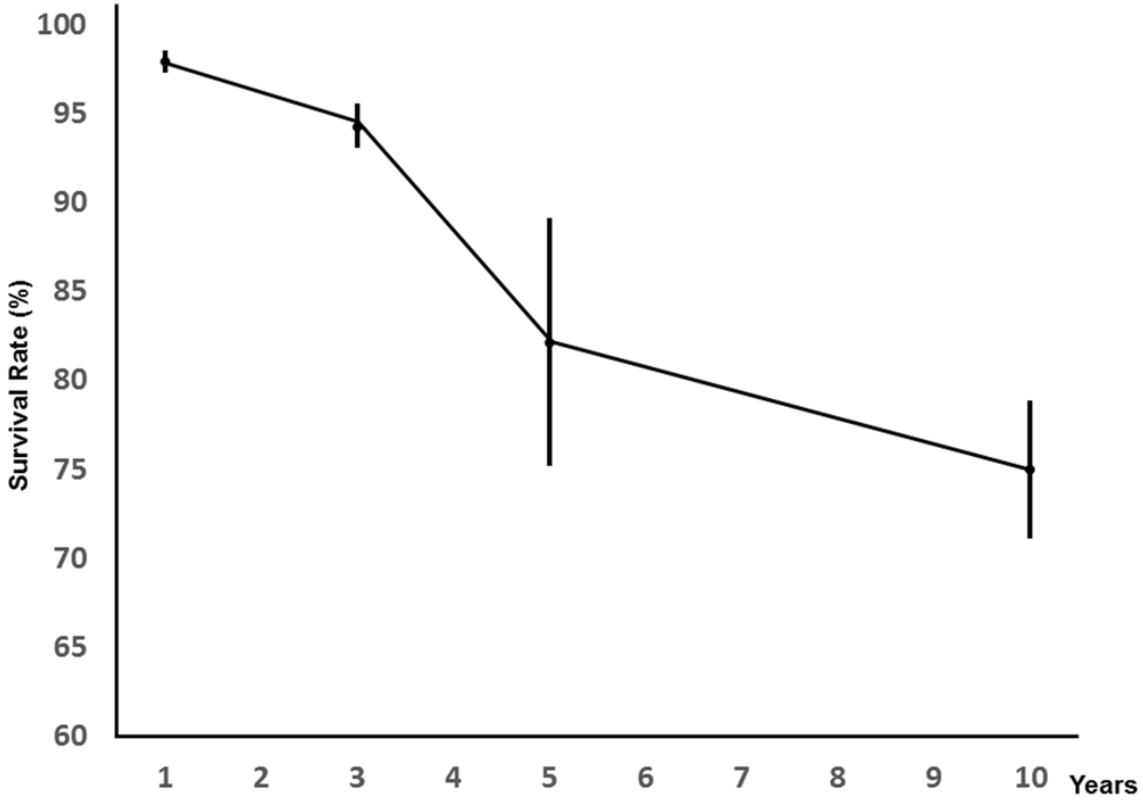
Comparsa di metastasi ossee nel 2015.

2016

2019

Sopravvivenza cardiomiopatia ipertrofica

5ys OS **82%**



Meta-analysis to assess pooled survival rates of patients with hypertrophic cardiomyopathy.

The pooled 1-, 3-, 5- and 10-year survival rates were 98.0%, 94.3%, 82.2% and 75.0%.

Liu, Nature Scientific reports, 2017.

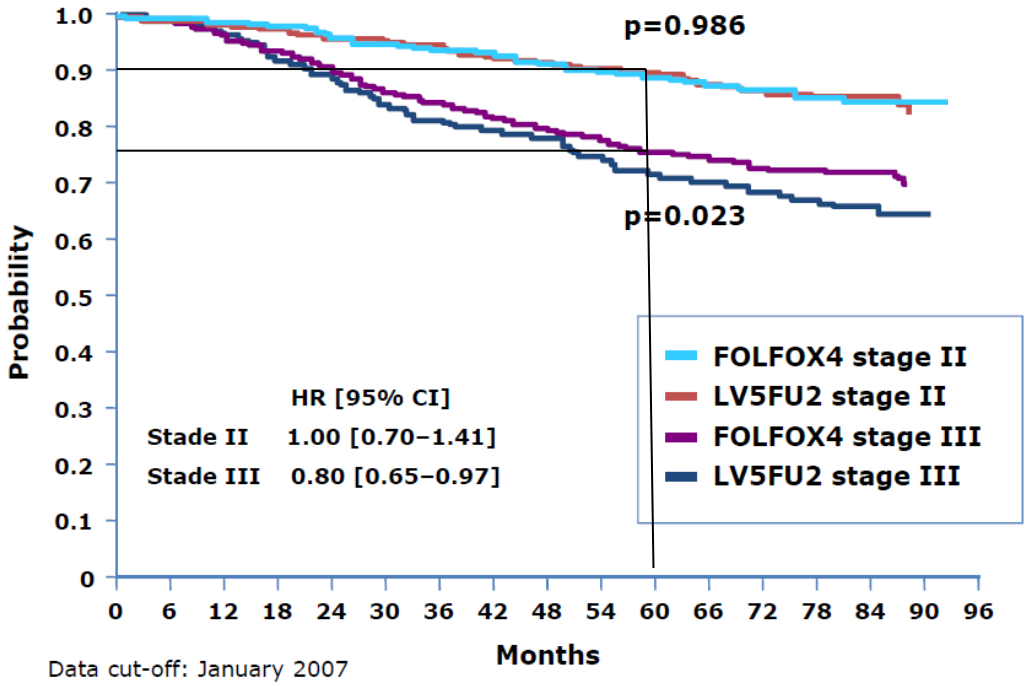
Sopravvivenza colon-retto
Non metastatico

Stadio II

5ys OS **90%**

Stadio III

5ys OS **75%**

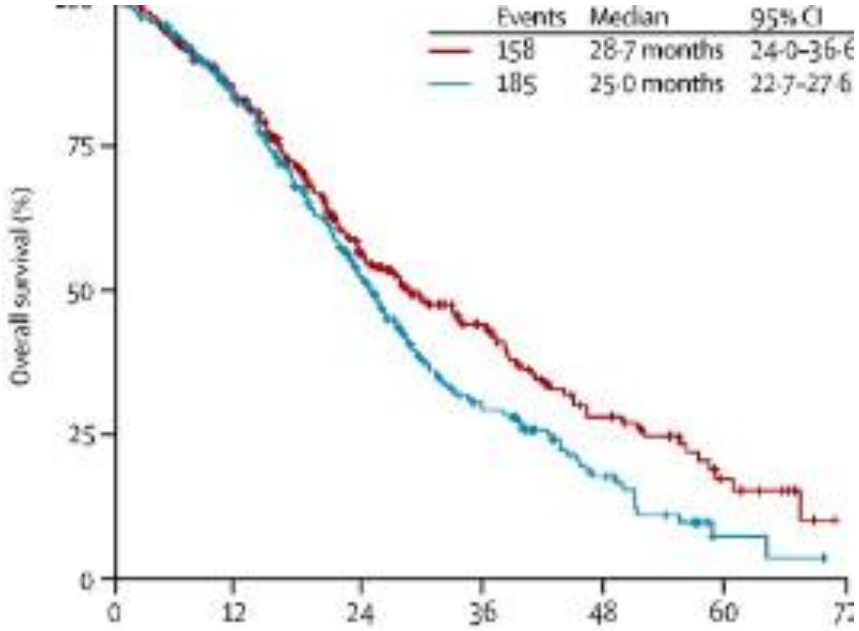


André, JCO 2009.

Sopravvivenza colon-retto Metastatico

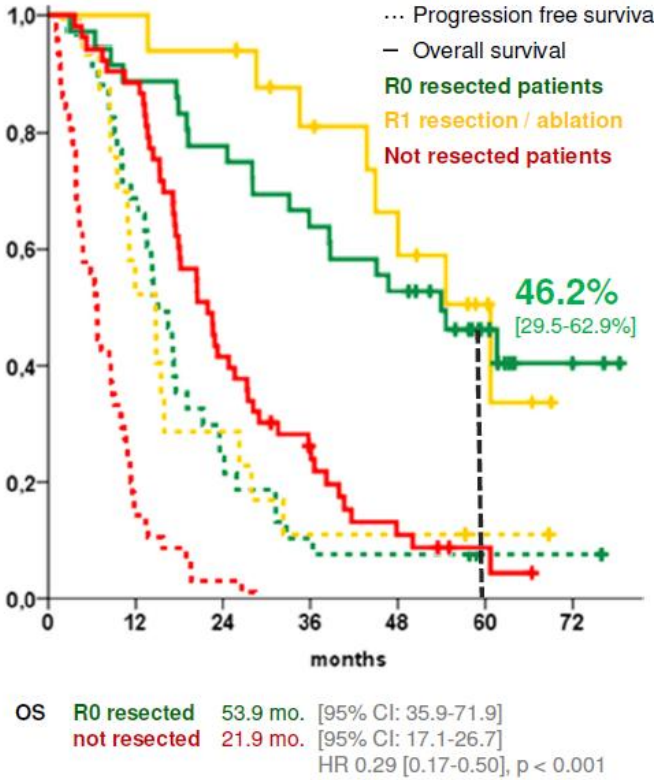
Metastasi non resecabili

5ys OS **25%**



Metastasi resecabili

5ys OS **45%**



Heinemann, The Lancet Oncol 2014.

Folprecht, ASCO 2013.

Sopravvivenza stroke e emorragia cerebrale

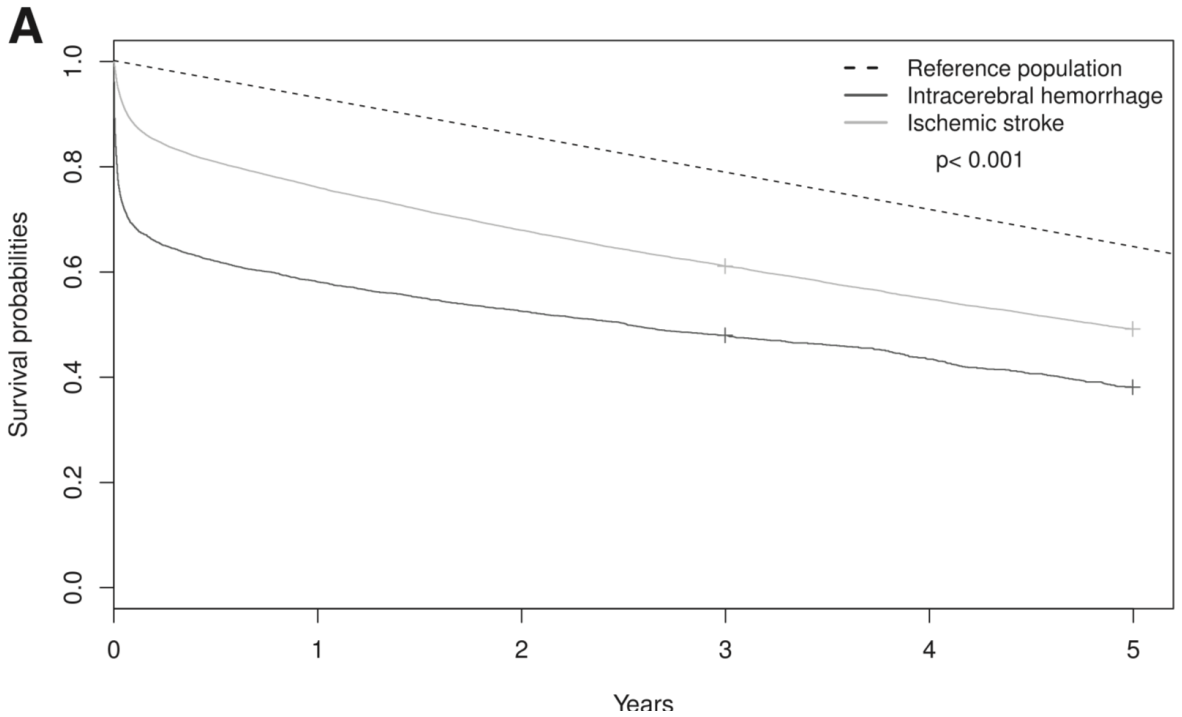
Recent survival and functional outcome data on ischemic stroke and intracerebral hemorrhage for up to 5 years poststroke from the Swedish Stroke Register (Riksstroke).

Emorragia

5ys OS **38%**

Stroke

5ys OS **50%**



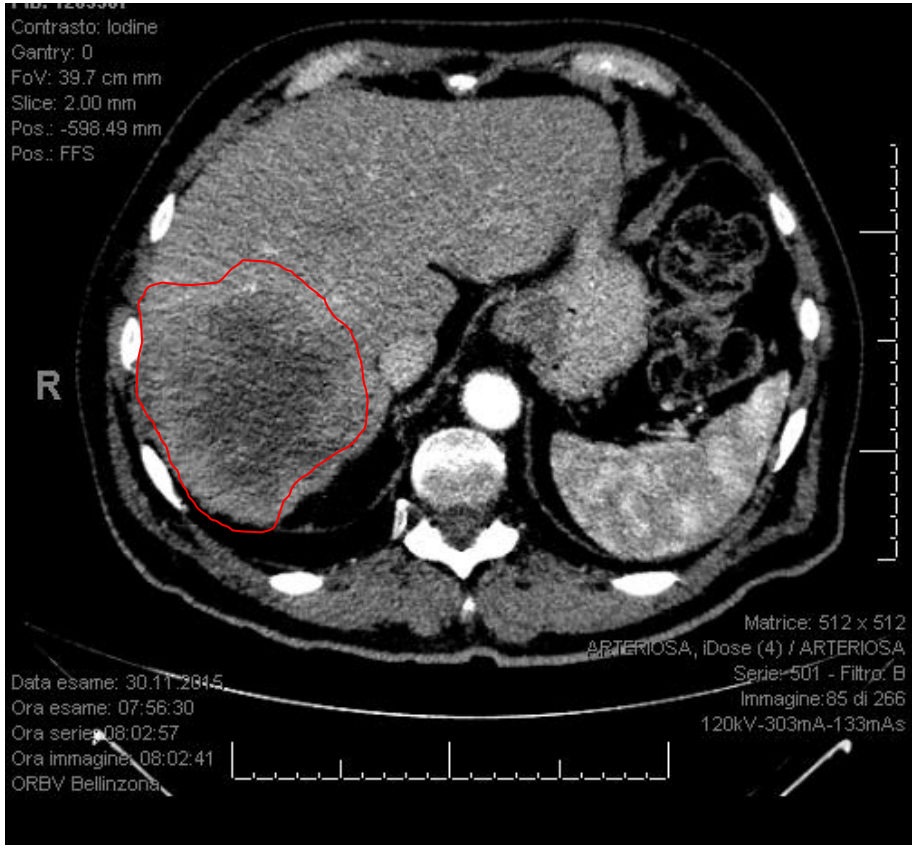
Sennfält, Stroke 2018.

Colon metastatico

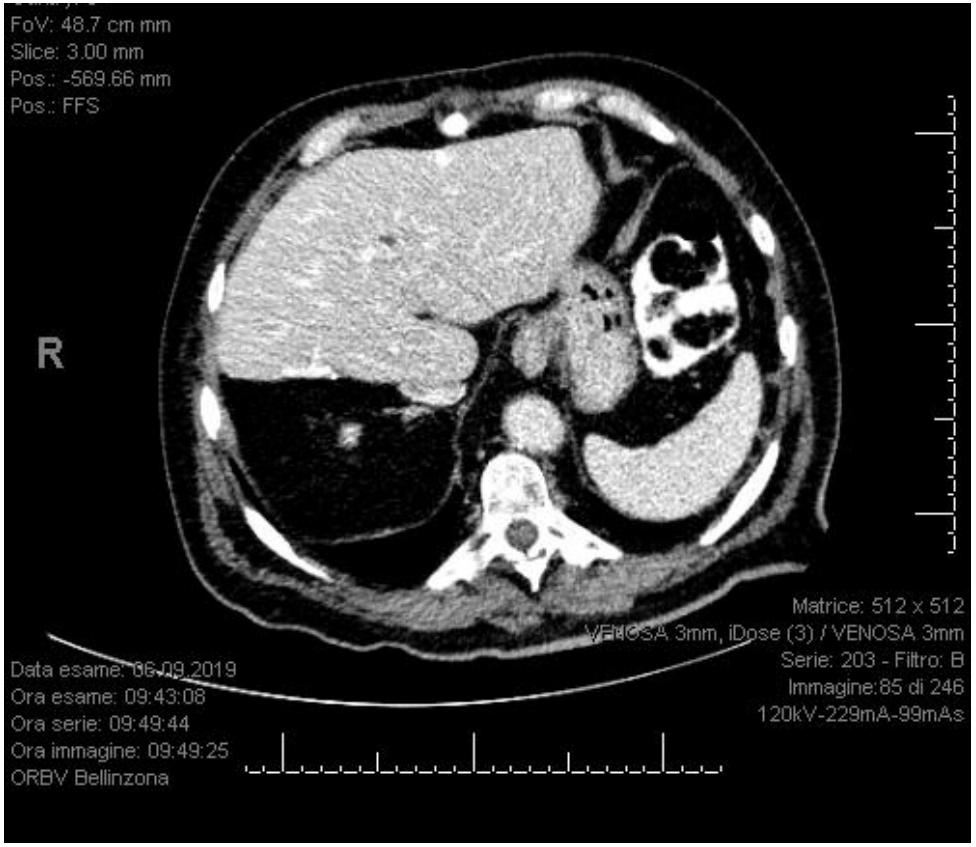
♂ 73 anni

Chirurgia e chemioterapia

Controllo di malattia 5 anni



2015

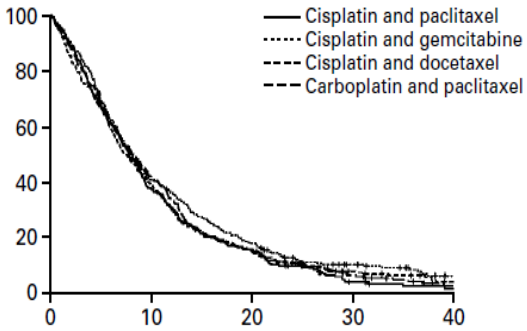


2019

Sopravvivenza tumore polmonare Metastatico

Dati storici

5ys OS 0%

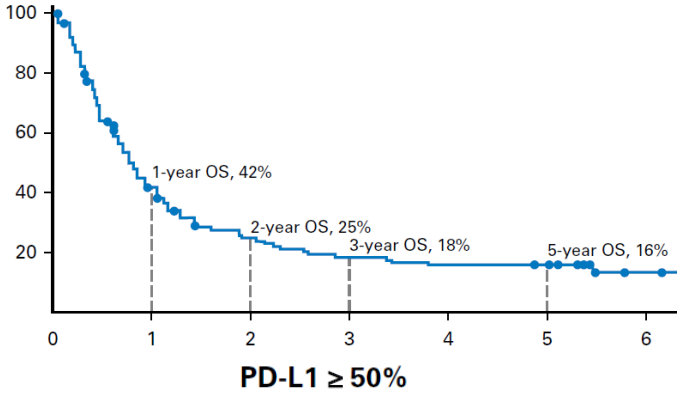


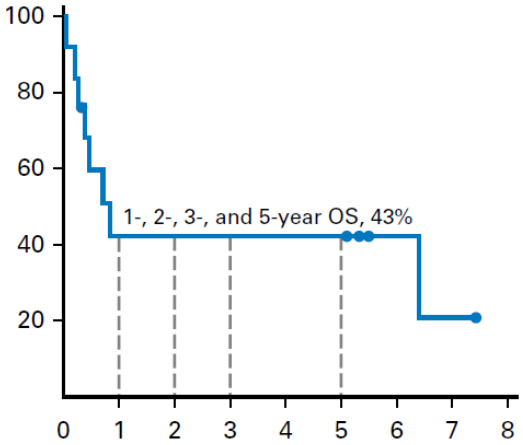
Schiller et al. NEJM 2002.

Immunoterapia

5 ys OS 16%

PD-L1>50% 5 ys OS **43%**



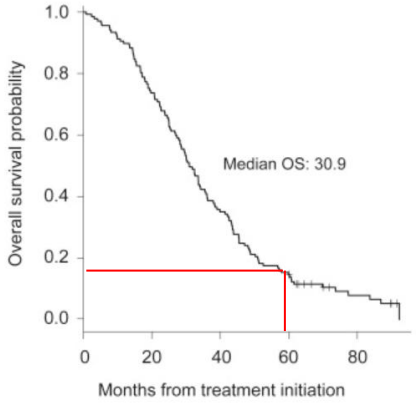


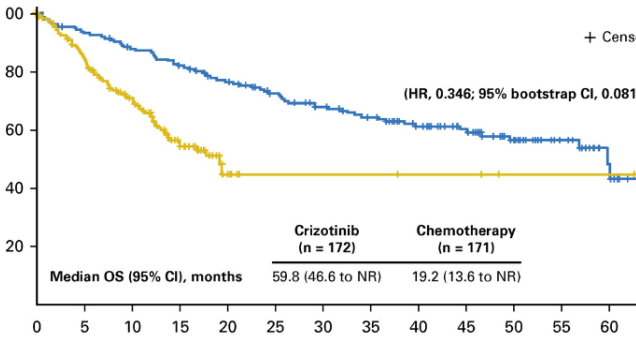
Gettinger, JCO 2018.

Terapie target

EGFR 5 ys OS 18%

ALK 5 ys OS **50%**





Lin, J Thor Oncol 2016.
Solomon, Jco 2018.

Sopravvivenza patologie polmonari

BPCO

5ys OS 65%

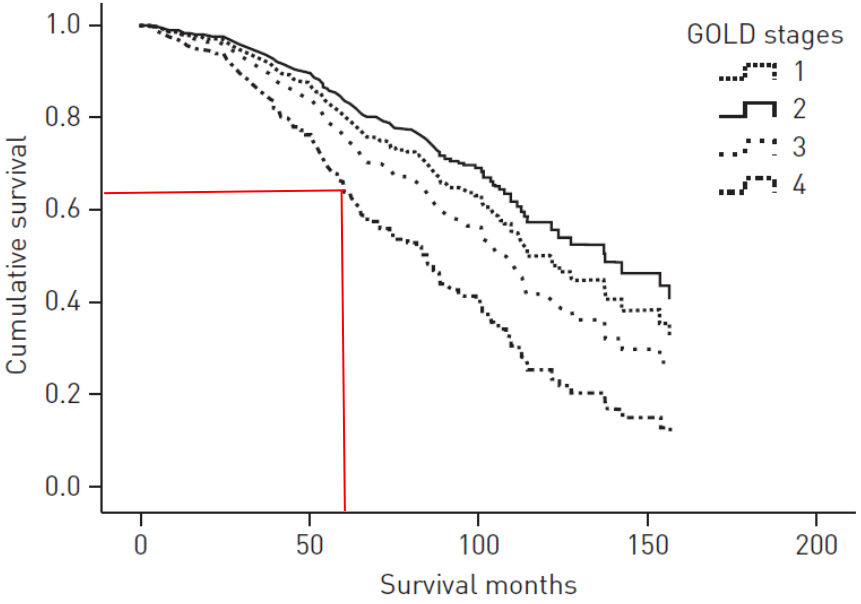


FIGURE 2 The Kaplan–Meier survival curves, adjusted for age, arterial oxygen partial pressure, carbon monoxide transfer factor % pred quartiles, forced vital capacity (FVC) % pred, forced expiratory volume in 1 s to FVC ratio, total lung capacity (TLC) % pred, functional residual capacity % pred, inspiratory capacity to TLC ratio, residual volume % pred, body mass index and arterial carbon dioxide partial pressure for the four population groups, categorised by Global Initiative for Chronic Obstructive Lung Disease (GOLD) stages. Survival only differed significantly between GOLD stage II and IV (p=0.04).

Boutou, Eur Respir J 2013.

Fibrosi polmonare idiopatica

5 ys OS 35%

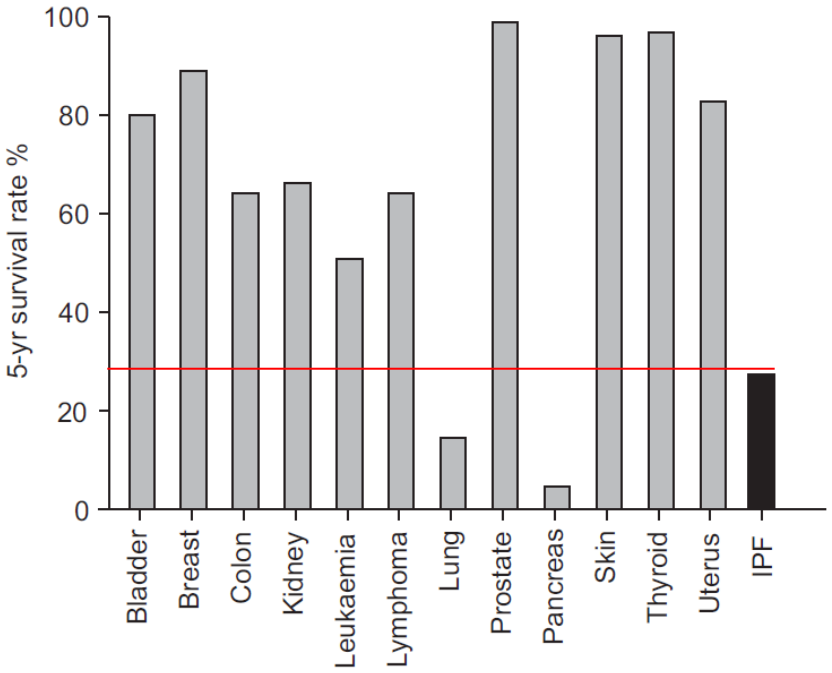


FIGURE 2. Comparison of the 5-yr survival rate for idiopathic pulmonary fibrosis (IPF) and different forms of cancer [14]. Statistics for cancer are from the US National Cancer Institute [15].

Vancheri, Eur Respir J 2010.

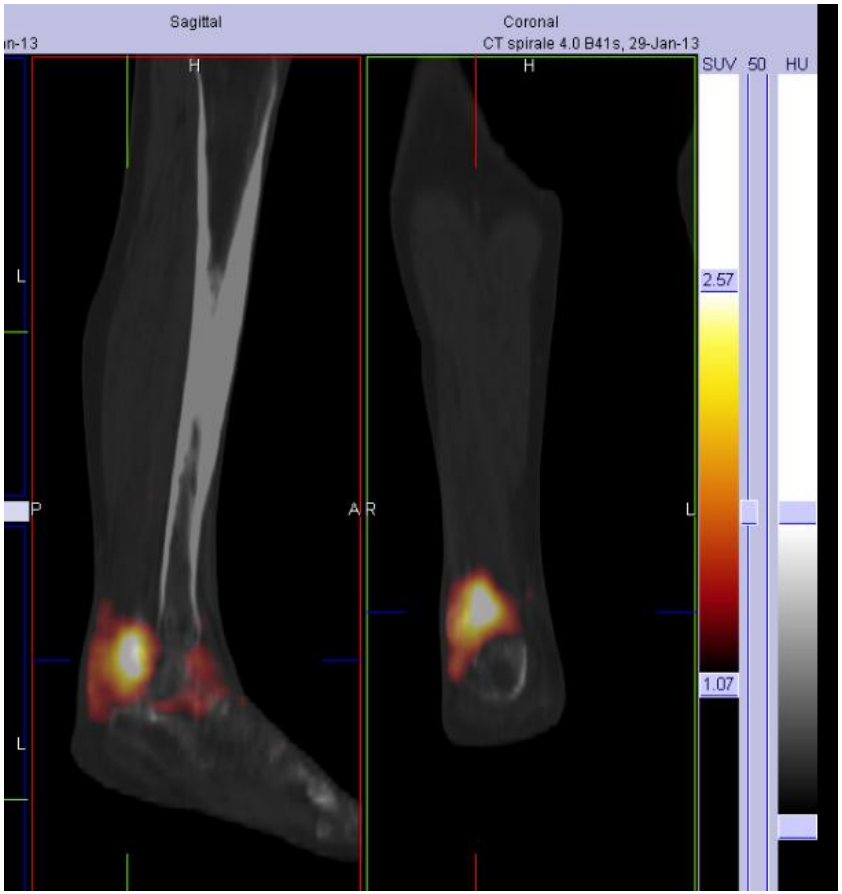
Polmone metastatico

60 anni

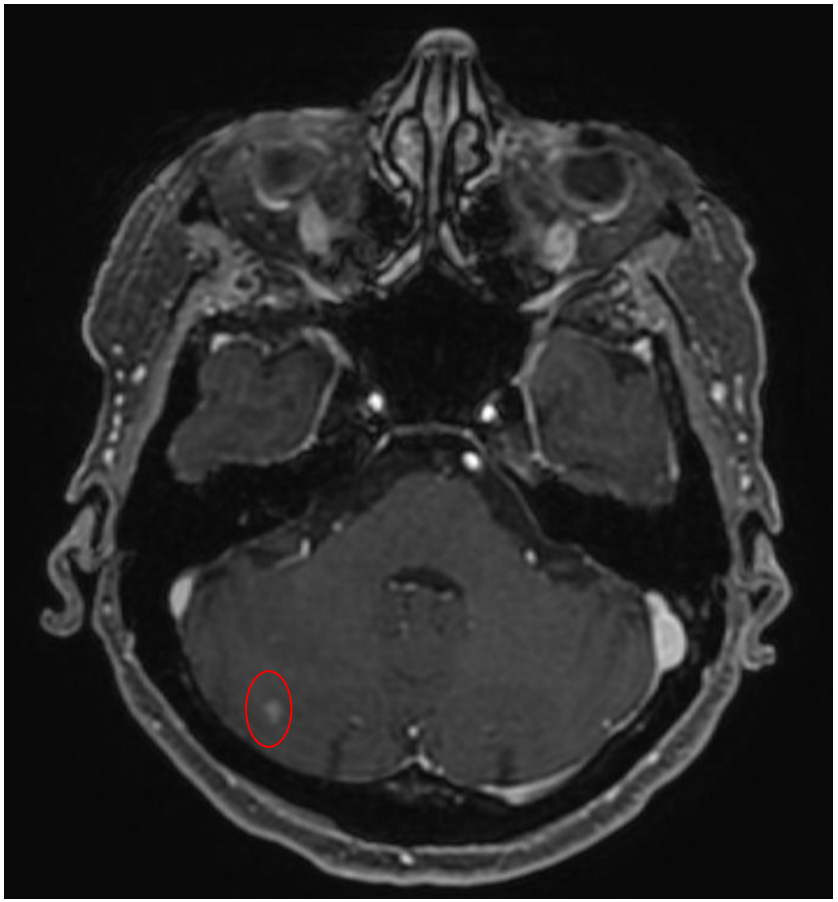
Chemio e immunoterapia

Chirurgia e radioterapia

Controllo di malattia a 6 anni



2013



2019

Sopravvivenza tumore renale

Terapie target

5ys OS **40%**

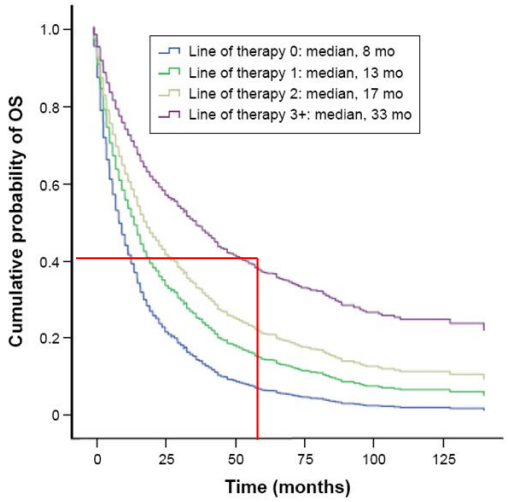
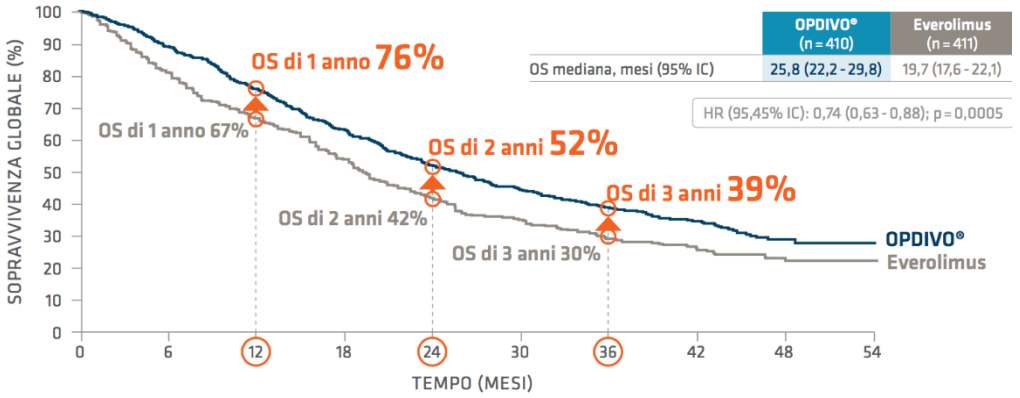


Figure S3 Kaplan–Meier estimates of OS in Norwegian patients diagnosed with mRCC by line of therapy.
Abbreviations: mo, months; mRCC, metastatic renal cell carcinoma; OS, overall survival.

Immunoterapia

3ys OS **39%**



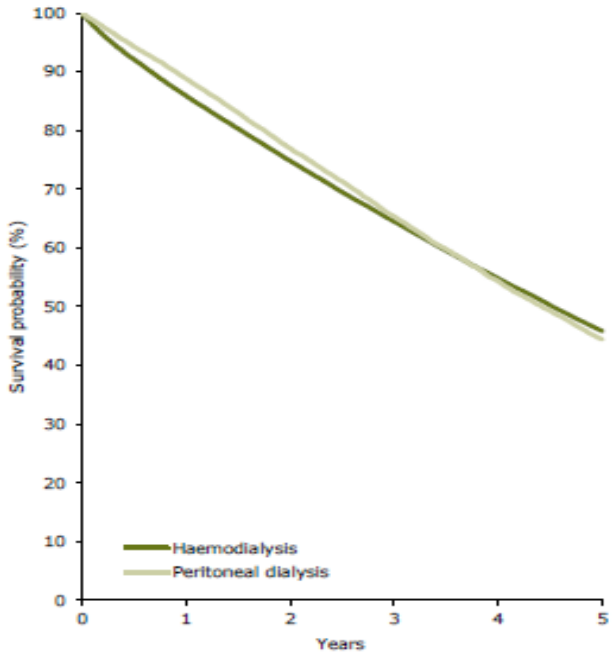
Beislan, Dovepress 2016.

Sopravvivenza pazienti in dialisi

Dialisi

5ys OS **40%**

Figure B.6.2
Adjusted patient survival by modality: Incident dialysis patients
from day 91, adjusted for age, sex, and primary renal disease



era edta REGISTRY Annual Report 2016

Beislan, Dovepress 2016.

Rene metastatico

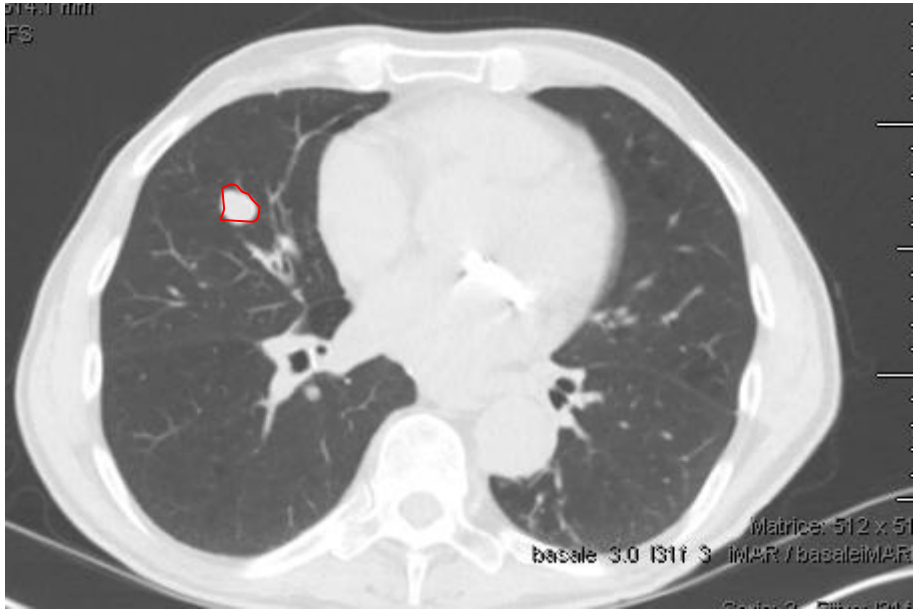
Carcinoma del rene sinistro, 2009.

Metastasi polmonari e linfonodali mediastiniche nel 2018.

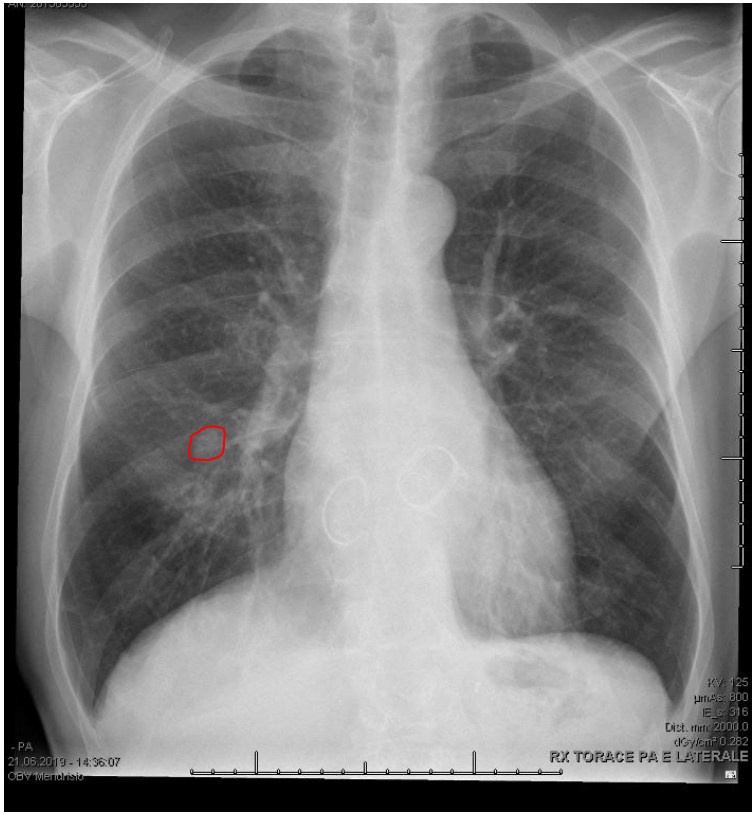
78 anni

Terapia a bersaglio molecolare sospesa per tossicità

Stabilità da un anno



2018

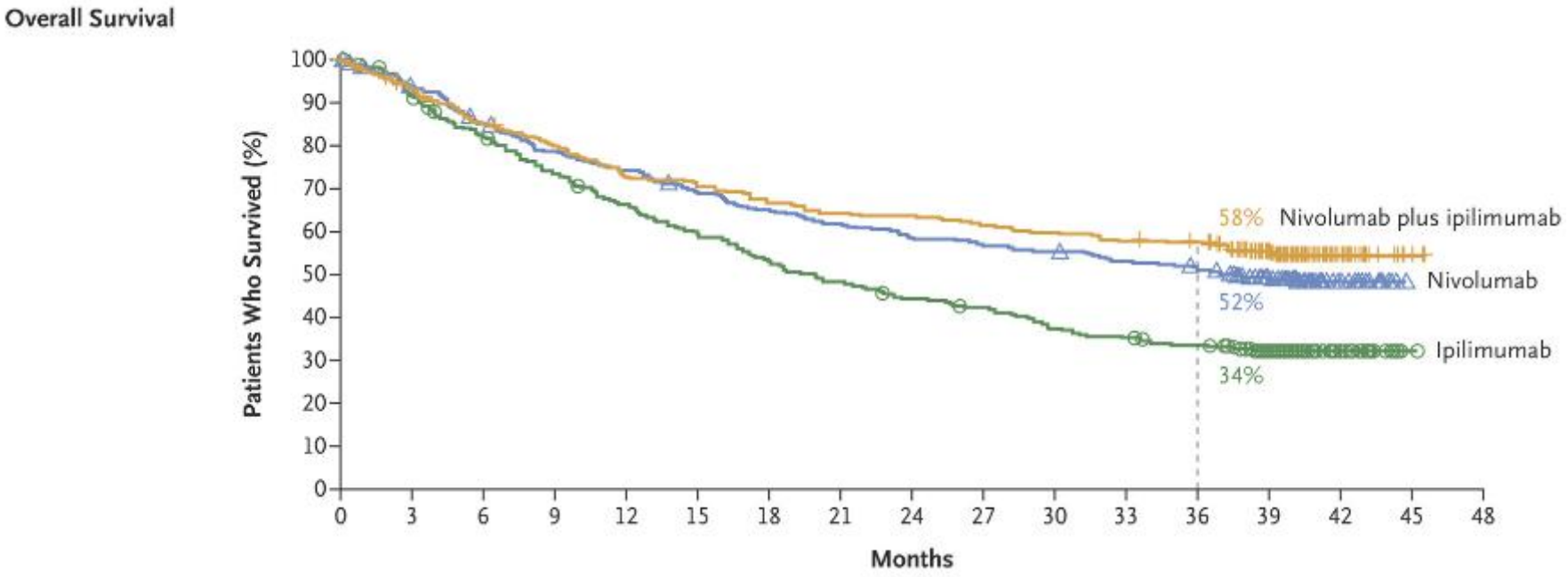


2019

Sopravvivenza melanoma Metastatico

Doppia immunoterapia

3ys OS **58%**



Hodi, The Lancet Oncol 2018.

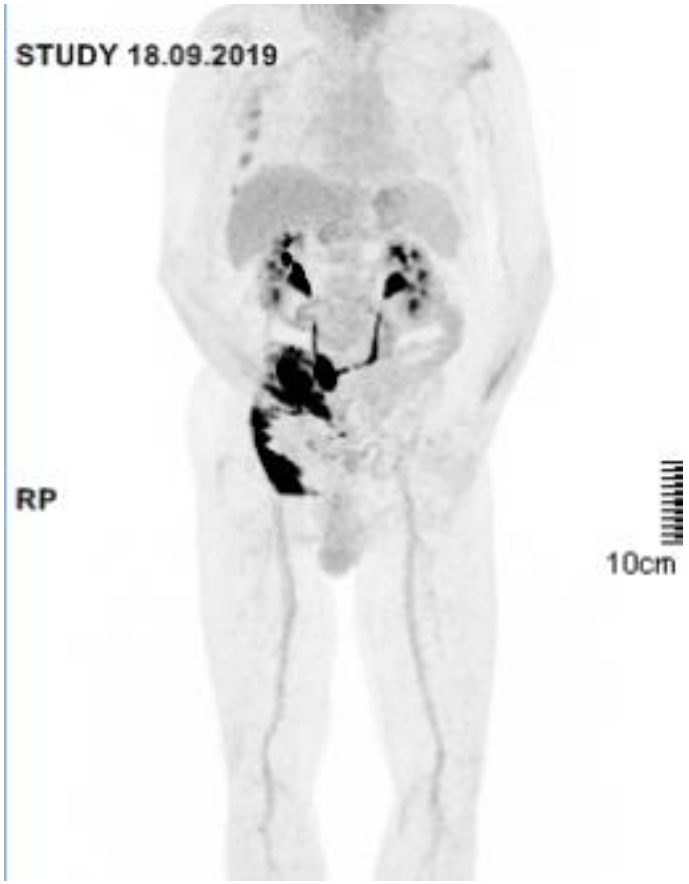
Melanoma metastatico

♂ 76 anni

Immunoterapia

Remissione completa a 1.5 anni

2018



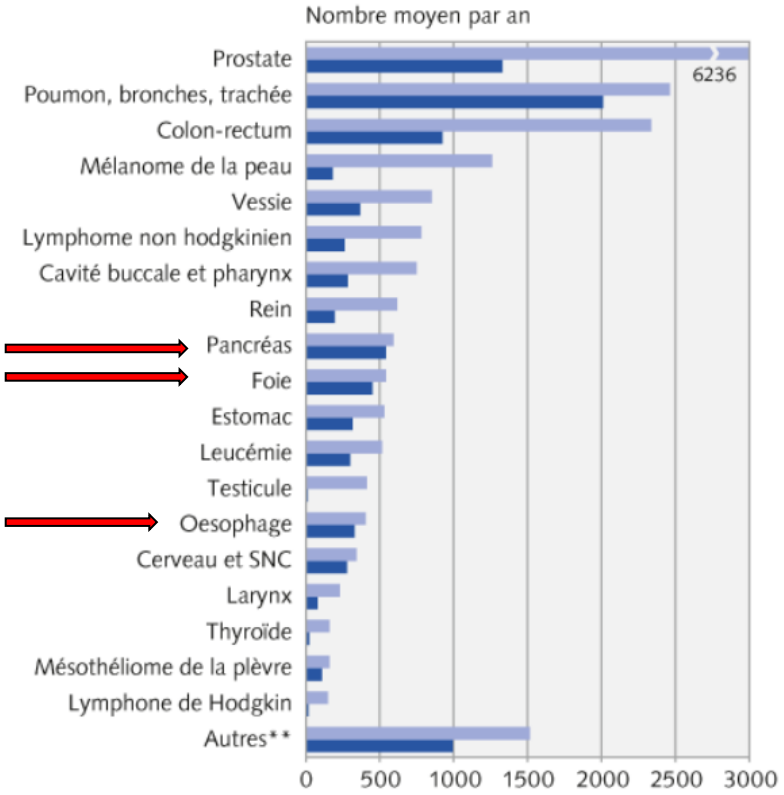
2019

non vorreste essere anche voi Chales Bukowski?
so anche dipingere. sollevare pesi. e la mia bambina pensa che io sia Dio.

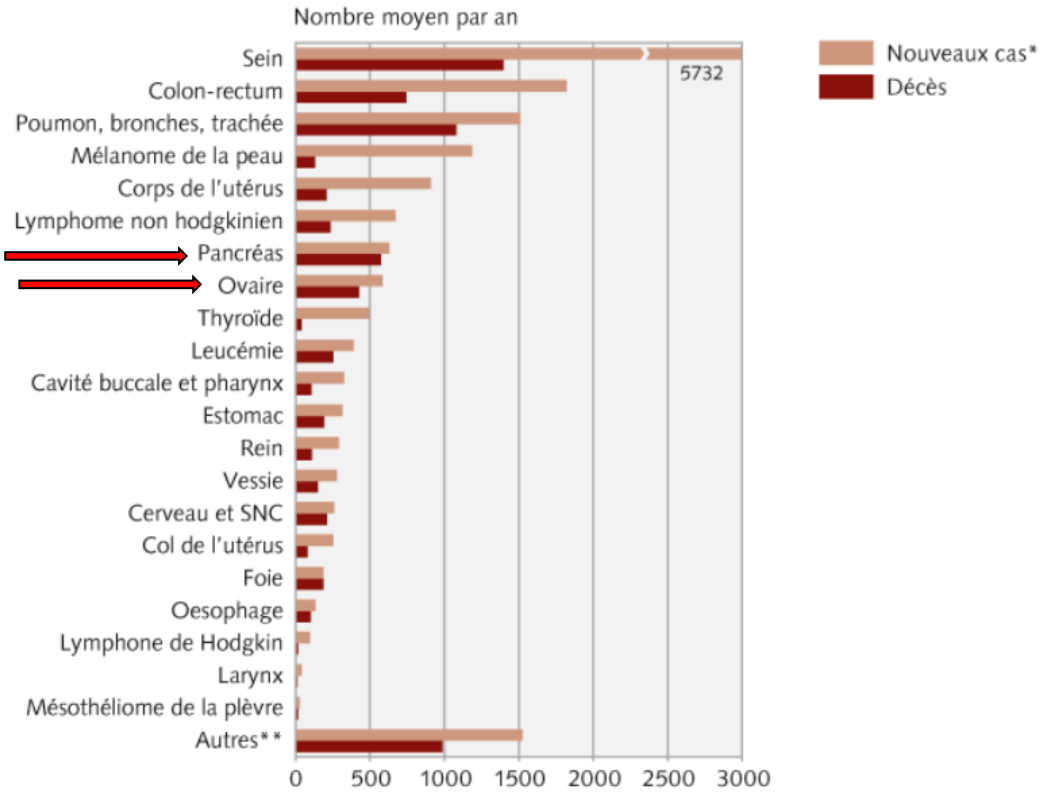
poi, altre volte, non va cosí bene.

Sopravvivenza tumori aggressivi

Nouveaux cas et décès chez les hommes selon la localisation cancéreuse, 2008–2012



Nouveaux cas et décès chez les femmes selon la localisation cancéreuse, 2008–2012



https://www.bag.admin.ch/bag/it/home/zahlen-und-statistiken/zahlen-fakten-nichtuebertragbare-krankheiten/krebserkrankungen-schweiz.html

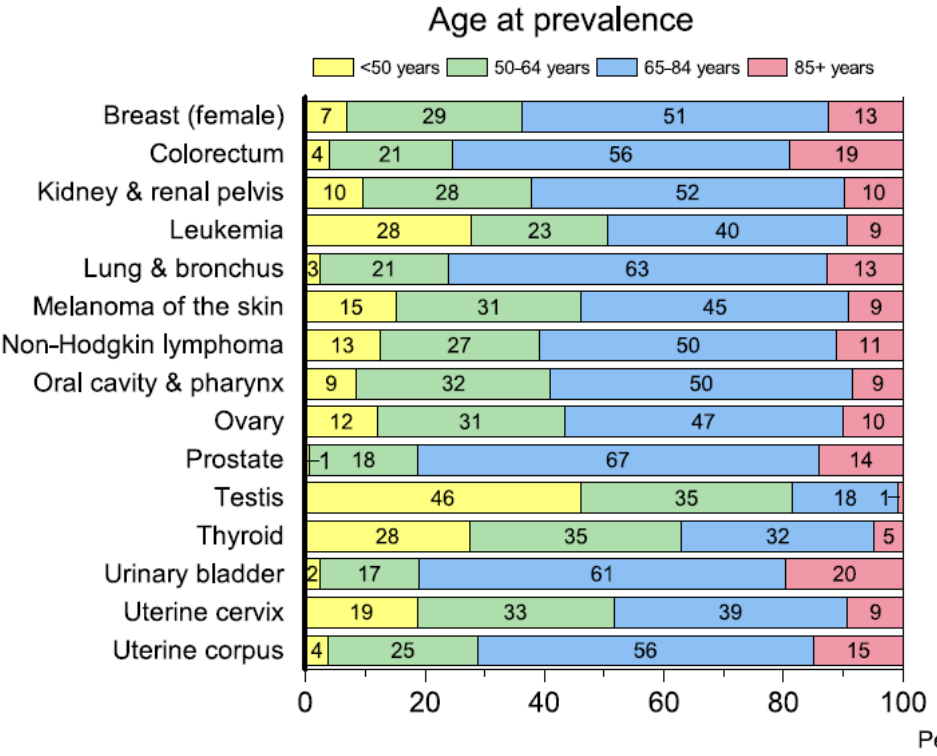
Sopravvivenza pazienti anziani

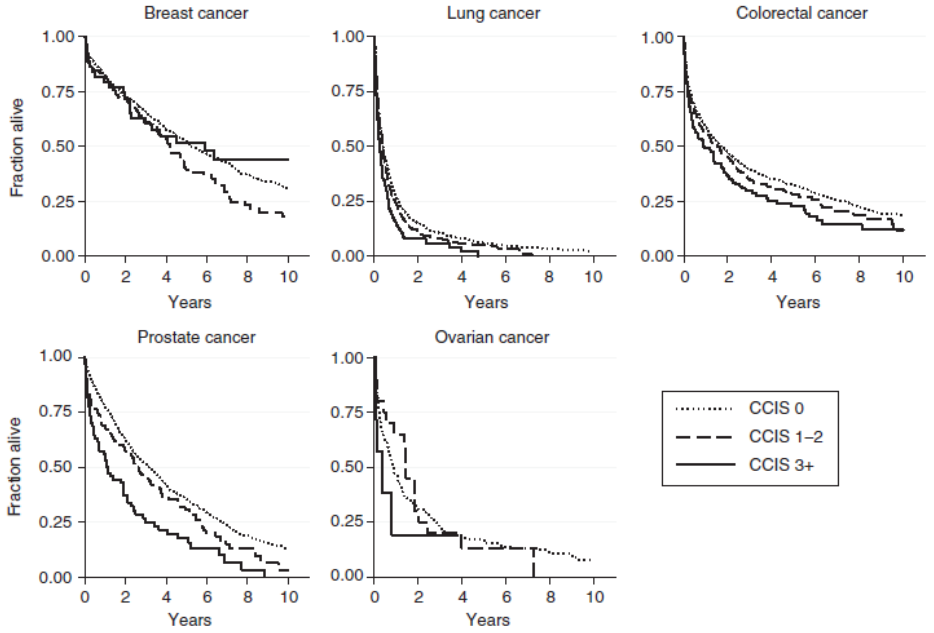
Circa il 70% dei nostri pazienti ha > 65 anni

Probabilità di sviluppare un tumore > 70 anni

1 su 3 per gli uomini

1 su 4 per le donne



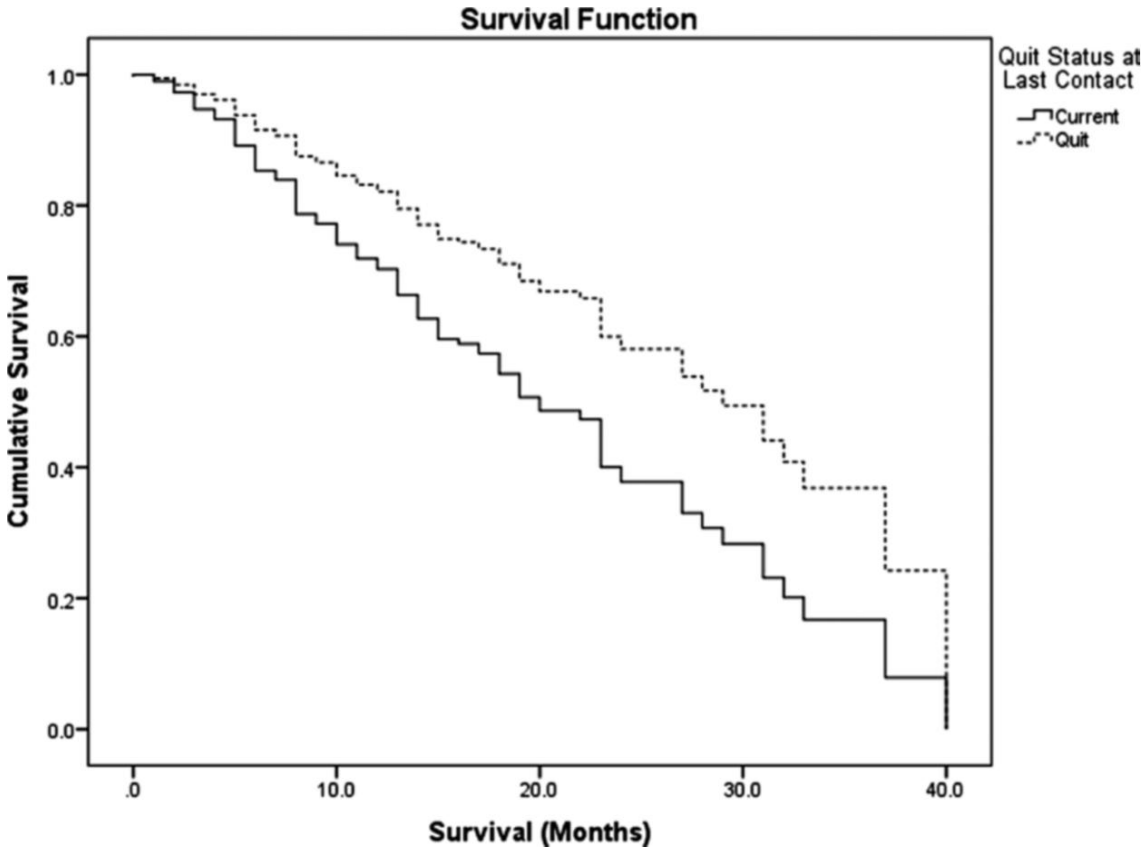


Miller, Statistics 2019.

Jørgensen, British Journal of cancer 2012.

Sopravvivenza e fattori di rischio

Tumore polmonare e tabagismo



Median survival for current users at last contact was 20 months and 29 months for those who were quit at last contact.

Dobson Amato, Journal of Thor Journal 2015.

Sopravvivenza e performance status

Istituto oncologico della Svizzera Italiana
Unità Cure Palliative

I-UCP-004

The Palliative Performance Scale (PPS)

Medical Care of the Dying, 4th ed.; p. 120. ©Victoria Hospice Society, 2006

Level	Ambulation	Activity & Evidence of Disease	Self-Care	Intake	Conscious Level
100%	Full	Normal activity & work. No evidence of disease	Full	Normal	Full
90%	Full	Normal activity & work. Some evidence of disease	Full	Normal	Full
80%	Full	Normal activity with Effort. Some evidence of disease	Full	Normal or reduced	Full
70%	Reduced	Unable Normal Job/Work. Significant disease	Full	Normal or reduced	Full
60%	Reduced	Unable hobby/house work. Significant disease	Occasional assistance necessary	Normal or reduced	Full or Confusion
50%	Mainly Sit/Lie	Unable to do any work. Extensive disease	Considerable assistance required	Normal or reduced	Full or Confusion
40%	Mainly in Bed	Unable to do most activity. Extensive disease	Mainly assistance	Normal or reduced	Full or Drowsy +/- Confusion
30%	Totally Bed Bound	Unable to do any activity. Extensive disease	Total Care	Normal or reduced	Full or Drowsy +/- Confusion
20%	Totally Bed Bound	Unable to do any activity. Extensive disease	Total Care	Minimal to sips	Full or Drowsy +/- Confusion
10%	Totally Bed Bound	Unable to do any activity. Extensive disease	Total Care	Mouth care only	Drowsy or Coma +/- Confusion
0%	Death	-	-	-	-

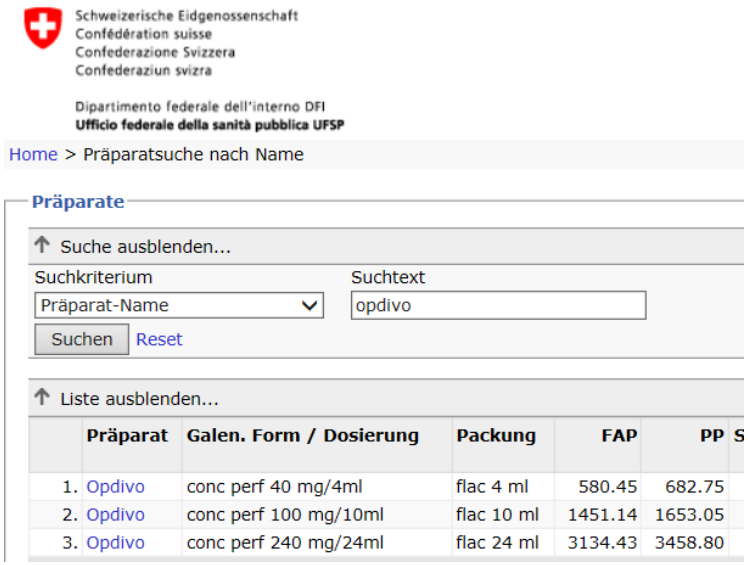
PPS Score	Average Survival in Hospice
50%	13.9 days
40%	10.3 days
30%	6.7 days
20%	2.6 days
10%	1.9 days

Palliative performance scale and survival among outpatients with advanced cancer

PPS	pts	OS (days)
40	38	28
50	116	71
60	208	104
70	251	173
80	109	197
90	22	226
Total	744	

Myers, Support Care Cancer 2015.

Costi delle nuove cure



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Dipartimento federale dell'interno DFI
Ufficio federale della sanità pubblica UFSP

Home > Präparatsuche nach Name

Präparate

Suche ausblenden...

Suchkriterium: Präparat-Name

Suchtext: opdivo

Suchen | Reset

Liste ausblenden...

	Präparat	Galen. Form / Dosierung	Packung	FAP	PP	S
1.	Opdivo	conc perf 40 mg/4ml	flac 4 ml	580.45	682.75	
2.	Opdivo	conc perf 100 mg/10ml	flac 10 ml	1451.14	1653.05	
3.	Opdivo	conc perf 240 mg/24ml	flac 24 ml	3134.43	3458.80	

Opdivo (BMS)

Dose fissa 240 mg

3134 .- costo fiala

Ogni 2 settimane

Worldwide total revenues of leading pharmaceutical companies in 2014 (in billion dollars)

Company		Total revenue ($)	R&D costs ($)	Sales and Marketing costs ($)	Other activitiescosts* ($)	Profit ($)	Profit Margin (%)
1.	Johnson & Johnson	71.3	8.2	17.5	31.8	13.8	19
2.	Novartis	58.8	9.9	14.6	25.1	9.2	16
3.							3
4.							4
5.							1
6.							0
7.	GSK	41.4	5.3	9.9	17.7	8.5	21
8.	AstraZeneca	25.7	4.3	7.3	11.5	2.6	10
9.	Eli Lilly	23.1	5.5	5.7	7.2	4.7	20
10.	AbbVie	18.8	2.9	4.3	7.5	4.1	22
Total Top 10 global companies Percentage of total revenue – profit		429.4	65.8 (19%)	98.3 (29%)	175.5 (52%)	89.8	20.9

Pharma highest profit: 20%, followed by banks 10%

→ Studi costo-beneficio

Take home messages

- La sopravvivenza dei pazienti con tumore è migliorata
- Alcuni tumori vanno considerati come le malattie croniche
- Altri rimangono malattie a prognosi cattiva

→ Importanza delle scelte condivise

Grazie per l’attenzione