

BjClub

**Ten Years of Breast Cancer Research
and Clinical Progresses**



JOURNAL CLUB:

Prospettive sul tumore della mammella: nuove osservazioni, quali opportunità?



24 Maggio 2008

Azienda Ospedaliera di Cremona
Aula Magna
"Magda Carutti"
ore 8.30



bjclub

breastJournalClub

26-27 NOVEMBRE 2009

Hotel Carobio del Dogi
via Verdi 100, 44
Cremona 26100

Programma

- 26 N. **Neoplasie e Immunologia**
Chiriacu
- 26 N. **Trasmissione genetica del DNA, il fattore**
Compton
- 26 N. **Infiammazione**
Chiriacu
- Discussioni guidate**
Chiriacu
- 26 N. **Target therapy: dalla biologia molecolare alla pratica clinica**
Chiriacu
- 26 N. **Regolazione di fattori di crescita nella mammella**
Chiriacu
- 26 N. **Clonal evolution**
- 26 N. **Il ruolo del sistema immunitario nella tumorigenesi**
Chiriacu
- 26 N. **La chemioterapia: dalla biologia molecolare alla pratica clinica**
Chiriacu
- 26 N. **Discussioni guidate**
Chiriacu
- 27 N. **Target therapy: dalla biologia molecolare alla pratica clinica**
Chiriacu
- 27 N. **Discussioni guidate**
Chiriacu

Per informazioni e iscrizioni: bjclub@cremona.it

Cremona, 26-27 novembre 2009

Cremona Ospedale
Via Verdi 100
44100 Cremona



Progress by Many Measures

Prevention

- Interventions for infection-related cancers
- Cancer susceptibility genes
- Drug and surgical risk reduction strategies

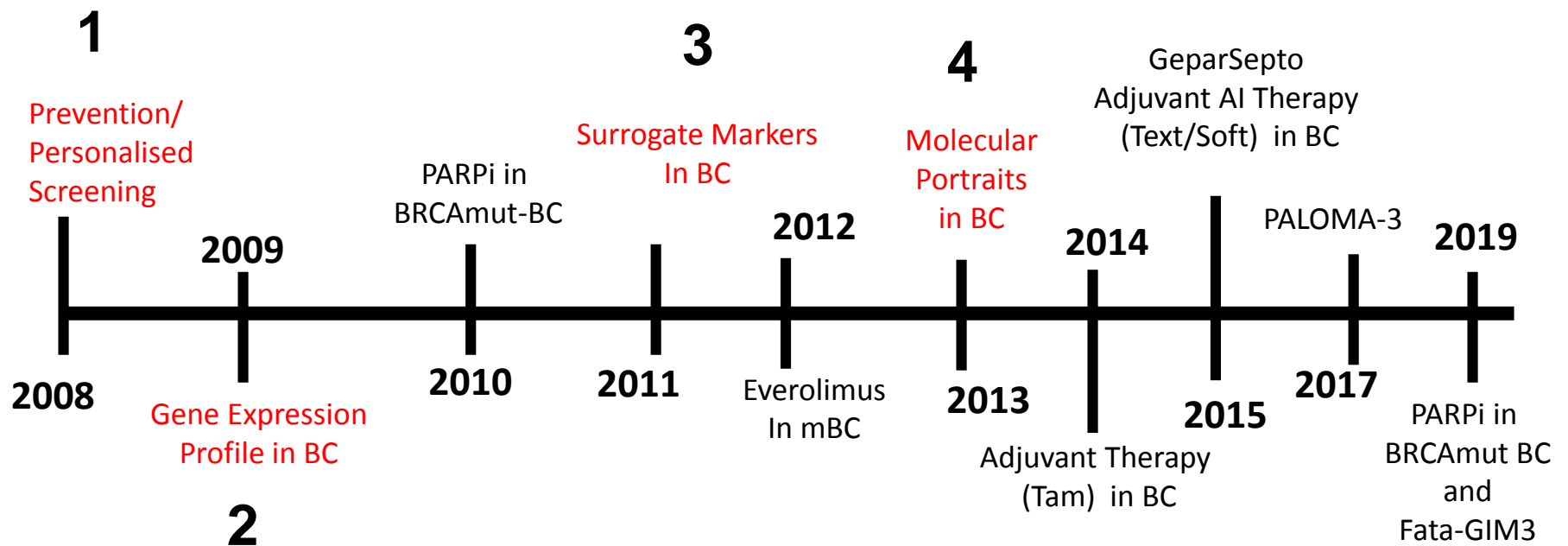
Treatment

- New therapies
- Imaging, radiation oncology and surgery advances
- Precision medicine
- Immunotherapy

Network

- Growing research area
- Real-Life Data
- Monitoring efficacy of the used strategies

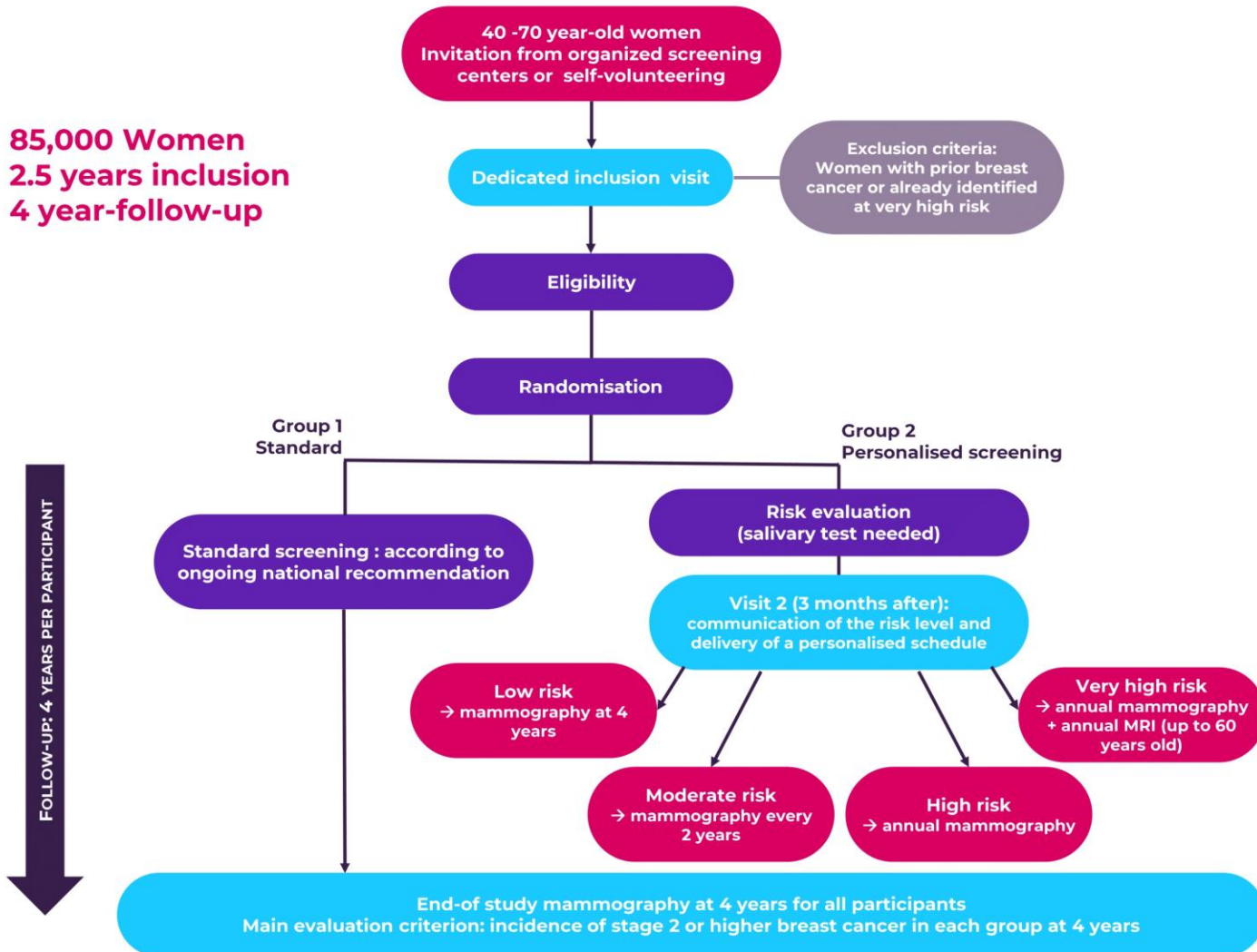
BjClub: Lights and Shadows



1 MyPeBS Programme: Personalised risk-based screening to standard screening

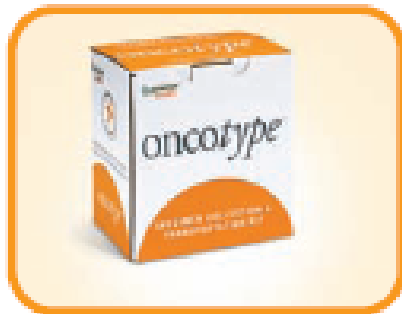
Study design

85,000 Women
2.5 years inclusion
4 year-follow-up



2

Genomic/Genetic Tests for BC



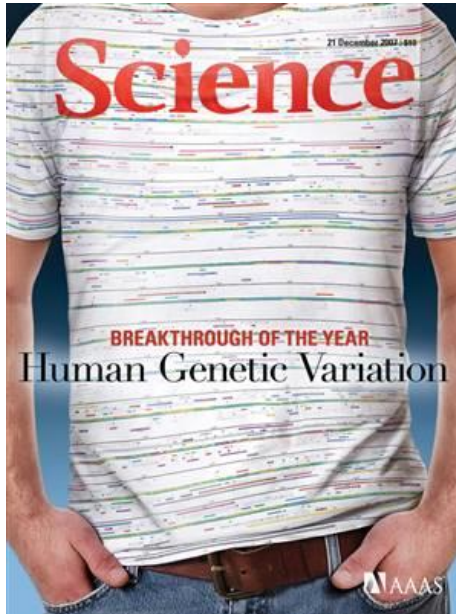
3

Surrogate biological markers for monitoring treatment response/resistance/selection in Breast Cancer?

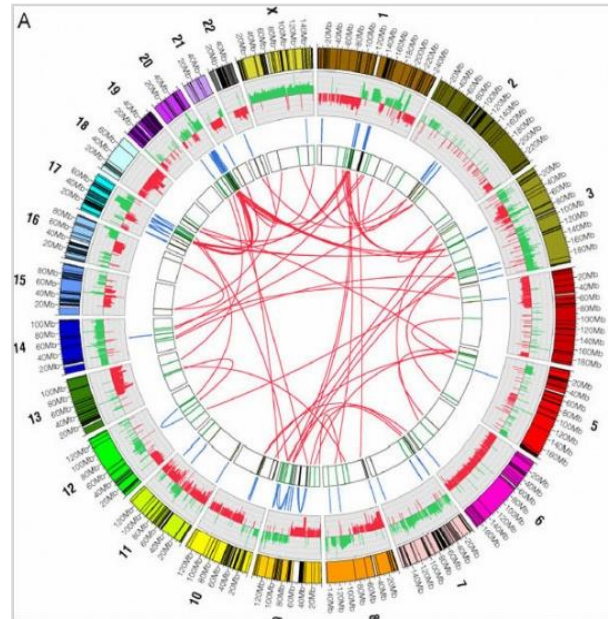
- **Circulating Tumor Cells?**
- **cfDNA (ESR1mut, Pi3KCA mut)?**
- **Surrogate Markers for Treatment Selection (CDK4/6i or Everolimus)?**
- **TILs?**

4

Science Serving Patients



Germline
Variation



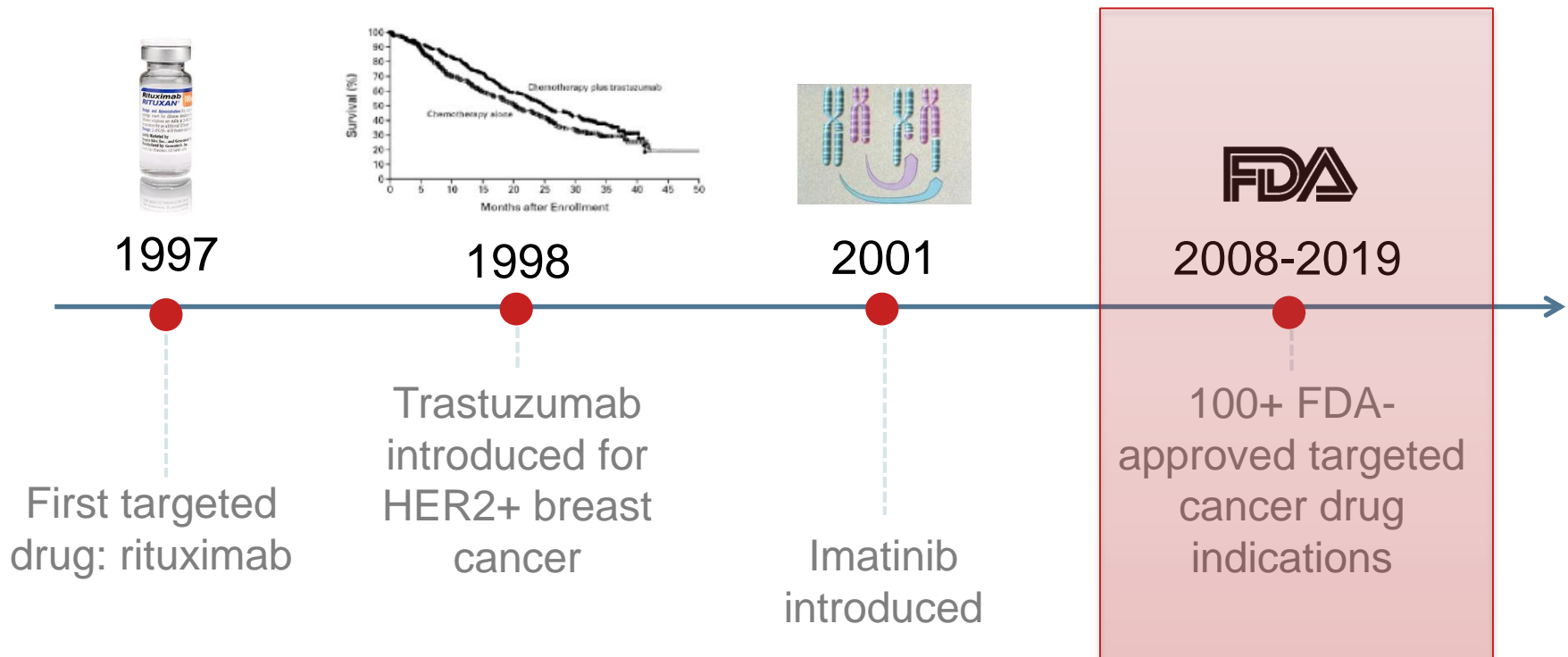
Somatic
Mutation



Personalized
Care

The New Oncology

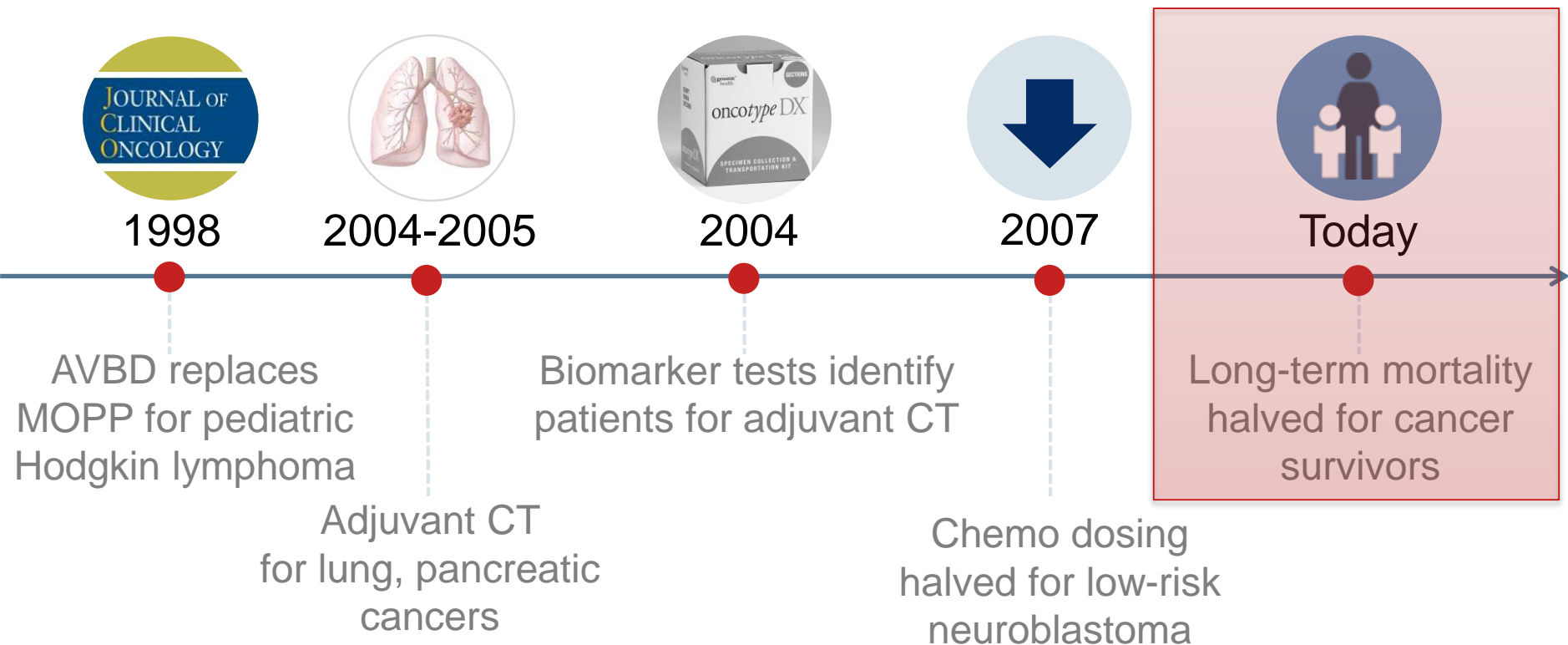
- Cancers classified by molecular abnormalities and site of origin
- Exceptional success when treatment is matched to a driver mutation



- Advent of the “precision medicine” era
- But cancer’s biology is far more complex than we had imagined

Chemotherapy Advances

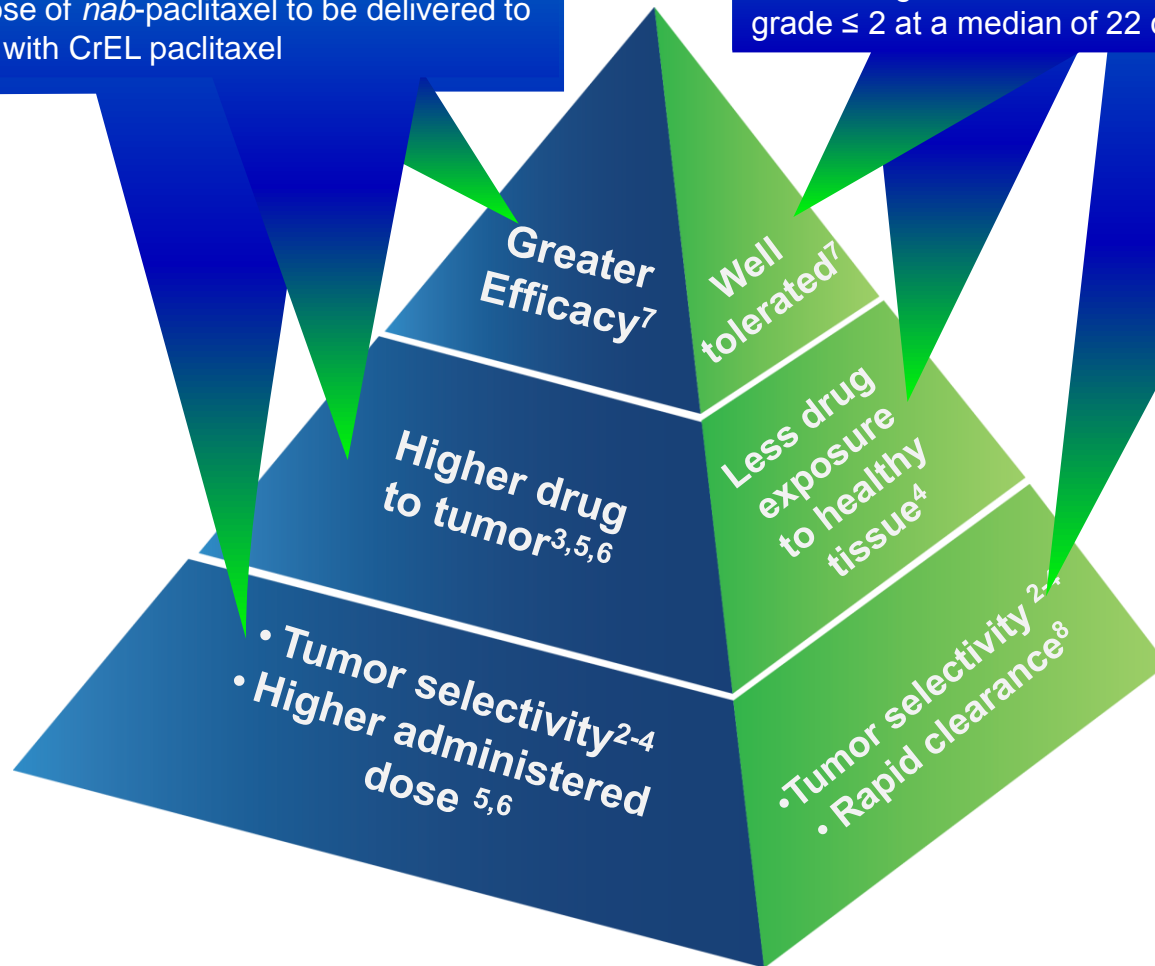
- Advances in both common and rare cancers
- Smarter, more refined approaches
- Increasing and decreasing treatment aggressiveness to maximize benefit



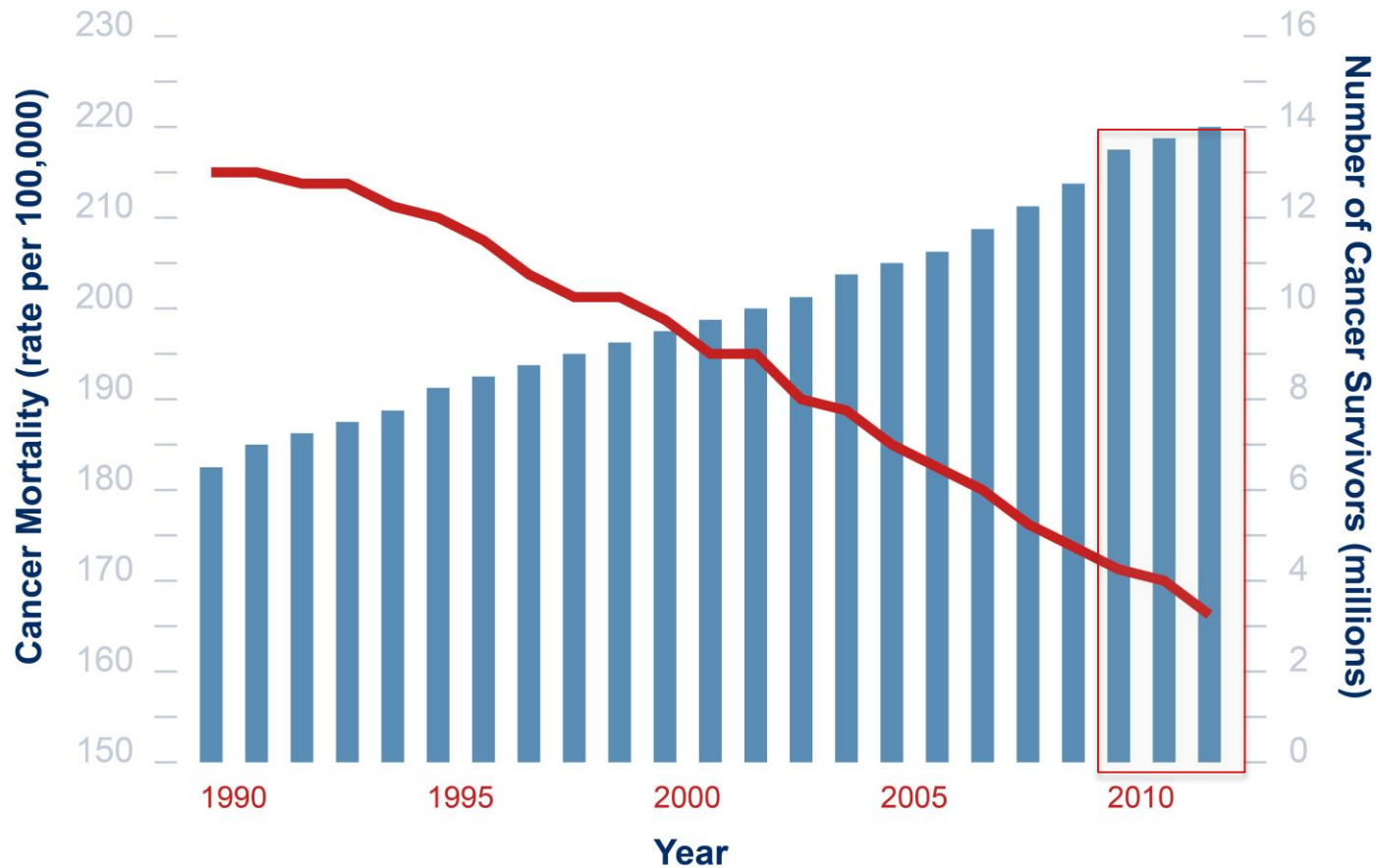
In the era of Precision Medicine, nab-Paclitaxel Achieves Higher Efficacy Through the Unique Properties of Albumin

The combination of a higher recommended dose (260 mg/m² vs 175 mg/m²) and greater tumor selectivity allows a higher dose of *nab*-paclitaxel to be delivered to tumors compared with CrEL paclitaxel

In a phase III trial vs CrEL paclitaxel, *nab*-paclitaxel led to less grade 4 neutropenia, equal febrile neutropenia, and more grade 3 SN, although the SN improved to grade ≤ 2 at a median of 22 days



Mortality Down, Survivorship Up



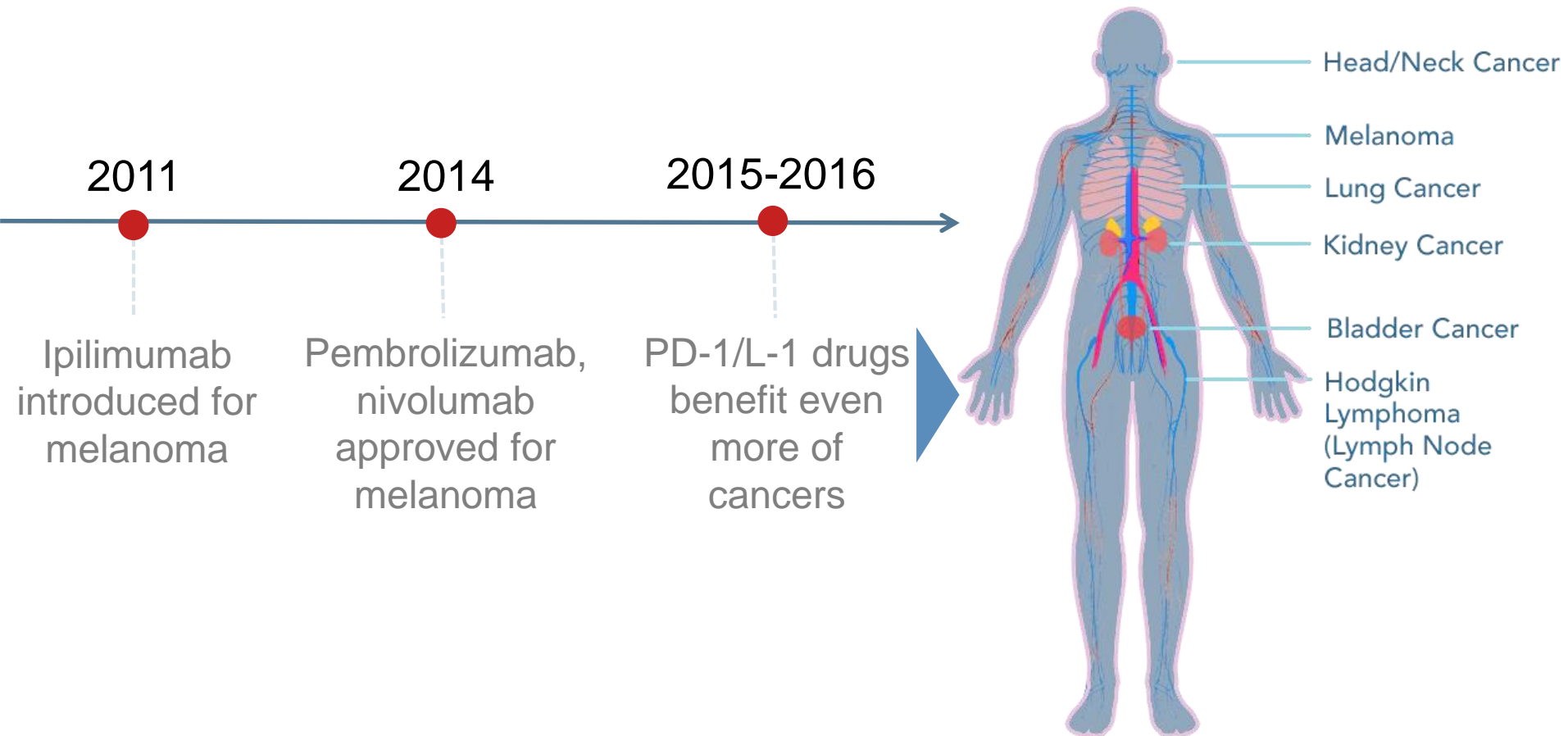
Sources: US Mortality Files, National Center for Health Statistics, CDC. DeSantis C, Chunchieh L, Mariotto AB, et al. (2014). Cancer Treatment and Survivorship Statistics, 2014. CA: A Cancer Journal for Clinicians.

The Path Forward

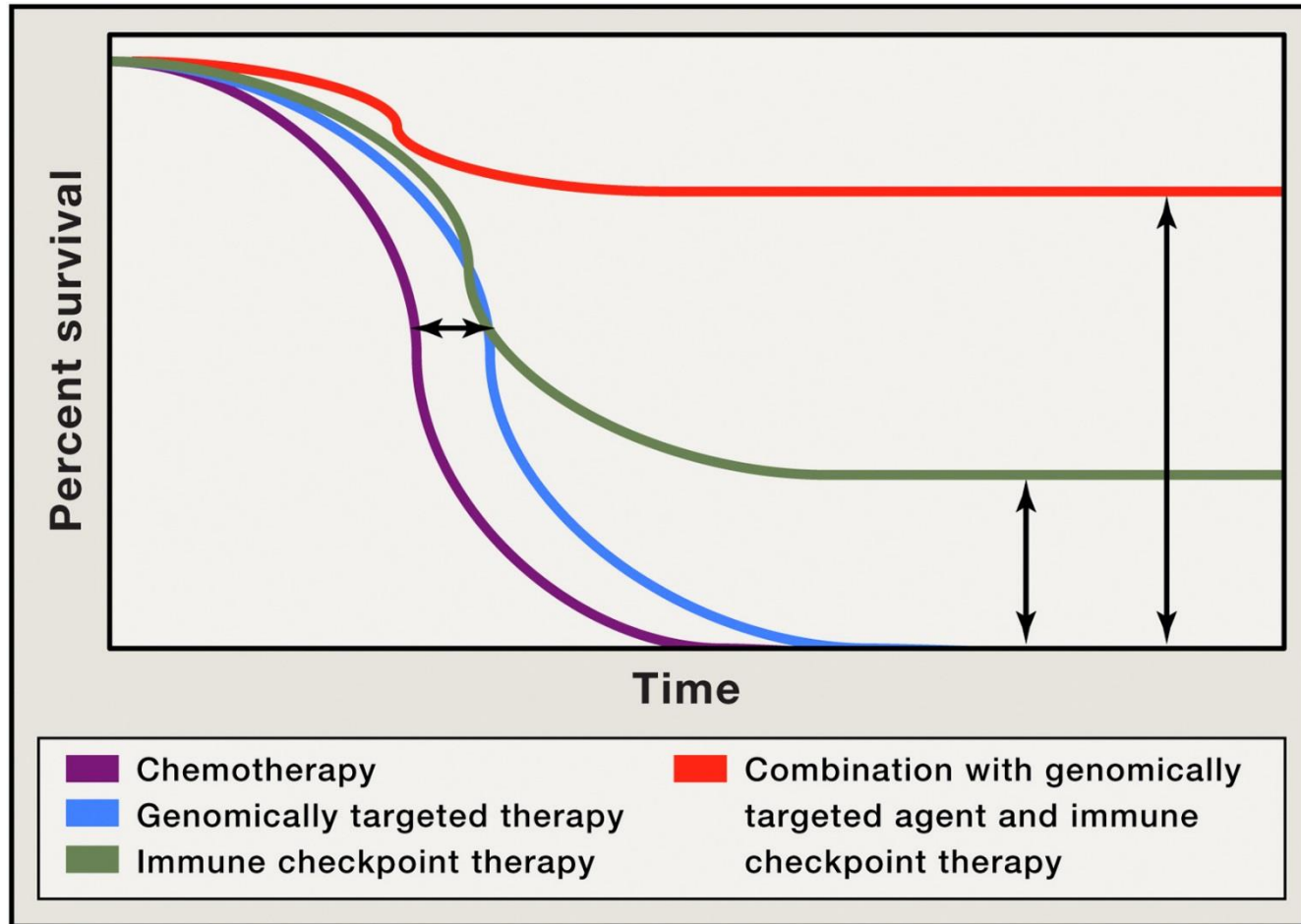


Rise of Immunotherapy

- Long-term disease control against recalcitrant cancers
- Game-changing discoveries – more coming



Rational, Adaptive Combinations are more likely to deliver curative results

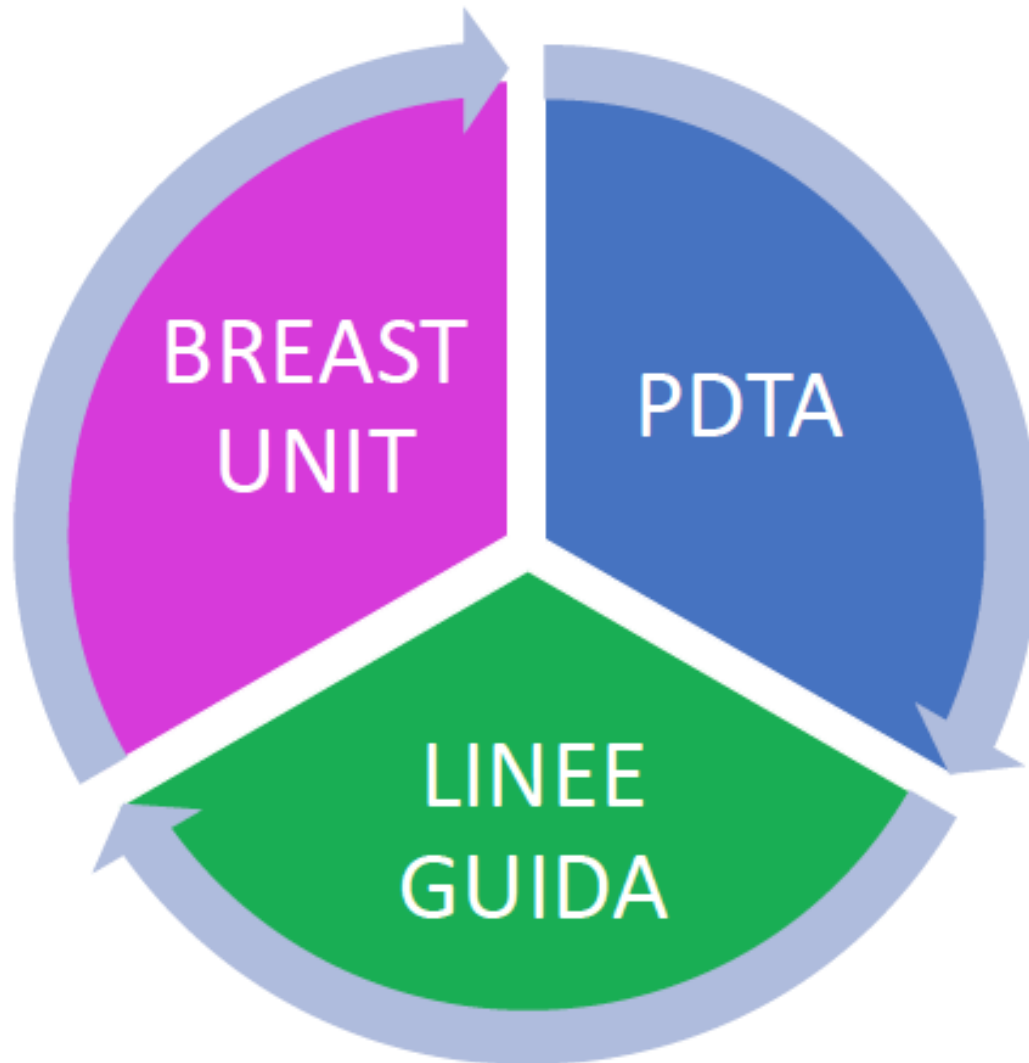


Progress by Many Measures

Network

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The Role of the Breast Unit



The Role of the Breast Unit

2 -Norme di Riferimento

- Intesa 185/CSR del 18 dicembre 2014 (Linee di indirizzo sulle modalità organizzative ed assistenziali dei Centri di Senologia)
- Intesa 21/CSR del 10 febbraio 2011 (Piano Oncologico)
- Intesa 82/CSR del 10 luglio 2014 (Patto per la Salute 2014-2016)
- LR 41 del 7.12.2006 (Riordino del Sistema Sanitario Regionale)
- DGR 54 del 23.1.2015 (Centri di senologia)
- DGR del 22.1.2010 (Biobanche)
- Linee Guida EUSOMA (*European Society of Breast Cancer Specialists*; www.eusoma.org)
- DM 70 del 2/4/2015 (Regolamento recante definizione degli standard qualitativi, strutturali, tecnologici e quantitativi relativi all'assistenza ospedaliera)

- **MULTIDISCIPLINARIETA'**
- **PERCORSI E PDTA**
- **QUALITA' ED INDICATORI DI PROCESSO E DI ESITO**

The Next Revolutions: Aggregating Information

Scientists

Clinical Researchers

Physicians

Patients

CollabRx interface showing search results for 'Metformin' and 'Insulin'. The interface includes sections for 'My Updates', 'My Lab', and 'Priority Projects'.

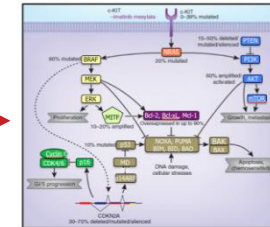
Clinical research dashboard showing drug cards for Metformin, Tremelimumab, and Interferon alpha-2b. Each card includes a chemical structure and a brief description of its use and efficacy.

Physician interface showing a list of patients with columns for Name, Age, Sex, and Location. A patient profile is visible, including a photo and medical history.

Patient information portal for melanoma, showing stages (Early, Stage III, Stage IV) and metastatic sites (Lymph Nodes, Liver, Brain/CNS, etc.). A 'Find drugs and trials' button is prominent.



Data



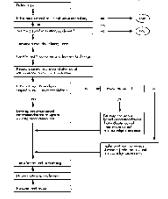
Molecular Disease Models



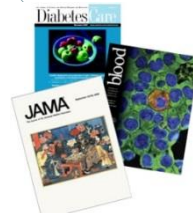
Trials



Treatments



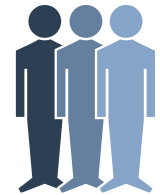
Guidelines



Literature



Tests



Cases

Progress Depends on Collaboration

