

26° ΕΟΠΕ ΕΤΑΙΡΕΙΑ ΟΓΚΟΛΟΓΩΝ ΠΑΘΟΛΟΓΩΝ ΕΛΛΑΔΑΣ

Web Scientific Event

20° ΕΕΑΟ ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΑΚΤΙΝΟΘΕΡΑΠΕΥΤΙΚΗΣ ΟΓΚΟΛΟΓΙΑΣ

5° ΕΣΟ ΕΛΛΗΝΙΚΟ ΣΥΝΕΔΡΙΟ ΟΓΚΟΛΟΓΙΑΣ

Διοργάνωση:

- Εταιρεία Ογκολόγων Παθολόγων Ελλάδας
- Ελληνική Εταιρεία Ακτινοθεραπευτικής Ογκολογίας

Σε συνεργασία με:

- Ελληνική Εταιρεία Χειρουργικής Ογκολογίας
- Ελληνική Εταιρεία Παθολογικής Ανατομικής
- Εθνικό Σύνδεσμο Νοσηλευτών Ελλάδος - Τομέα Νοσηλευτικής Ογκολογίας

Υπό την Αιγίδα:

ESMO GOOD SCIENCE BETTER MEDICINE BEST PRACTICE

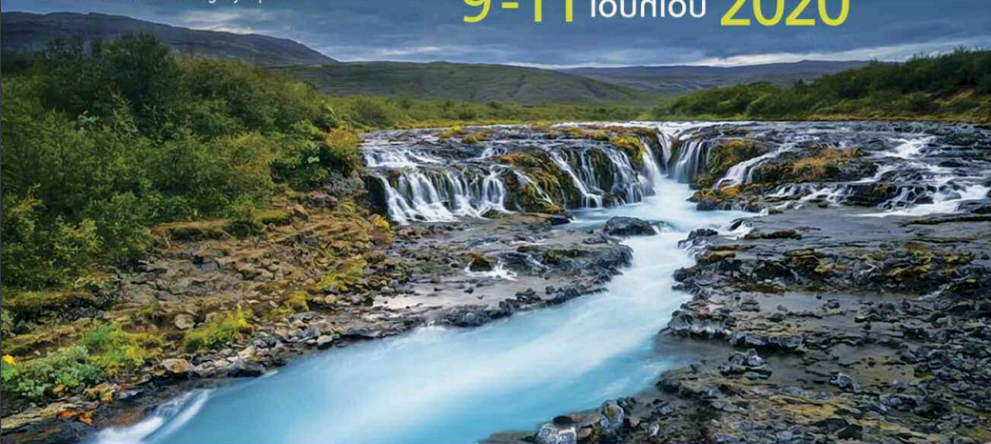
www.eso2020.gr

Χορηγούνται 16 Μόρια Συνεχιζόμενης Ιατρικής Εκπαίδευσης (CME-CPD) από τον Πανελλήνιο Ιατρικό Σύλλογο και 17 ESMO-MORA Category 1 points

από τους
Χειμάρρους των
Πληροφοριών
στην Κοίτη
της Πράξης

WEB ONLY

9-11 Ιουλίου 2020



Επιστημονικό Πρόγραμμα

το μοριακό διαγνωστικό χάος:
μπορεί να επηρεάσει την ακτινοθεραπεία;

Ιωάννης Γεωργακόπουλος MD, PhD
Ακτινοθεραπευτής Ογκολόγος

δήλωση συμφερόντων

- I do not have any conflicts of interest to declare

outline

- general facts
- principles of combining RT & systemic therapy
- RT & molecular targeted drugs
- do data exist?
- biomarkers in radiotherapy
- conclusions

general facts

general facts

- modern radiotherapy:

highly conformal (intensity modulated radiation therapy)

image guided radiation therapy

functional imaging



new techniques:

VMAT

SBRT

SRS

general facts

- radiotherapy alone or in combination with systemic therapy
- important component of cancer treatment
- standard of care:
 - head neck
 - lung
 - gastrointestinal tract
 - urinary & genital organs
 - central nervous system
- over of 50% of cancer pts

general facts

- substantial advances in precision cancer medicine

molecular targeting agents



- driver mutations
- aberrant intracellular signaling
- tumor microenvironment

general facts

Currently Recommended Predictive Molecular Testing for Prostate Cancers

| BIOMARKER | TEST DETECTS | WHEN | TECHNOLOGY | RECOMMENDATIONS | EVIDENCE | CANCER TYPE |
|-------------------------------|---------------------------------|---|------------|--|------------------------------|------------------|
| <i>BRCA1</i> and <i>BRCA2</i> | Mutation (somatic and germline) | Initial workup: If the patient has a strong family history on initial diagnosis ^a If the patient has metastatic, castration-resistant disease | NGS | A known germline mutation could help guide therapy (eg, PARP and other DDR enzyme inhibitors) | Lower level; wide acceptance | Prostate cancers |
| <i>ATM</i> | Germline mutation | Initial workup showing strong family history If patient has metastatic castration-resistant disease | NGS | NCCN guidelines recommend inquiring about known <i>BRCA1/BRCA2</i> mutations in a patient's family for prostate cancer early detection ⁶¹ and Na et al ⁶³ proposed that, if a patient's family member died of prostate cancer before age 75 y, a genetic test of <i>BRCA1/BRCA2</i> and <i>ATM</i> is recommended Known <i>BRCA1/BRCA2</i> and <i>ATM</i> germline mutations could help guide therapy with PARP and other DNA damage–response enzyme inhibitors | Lower level ^b | Prostate cancers |

general facts



role of radiation therapy
in this molecular chaos

general facts

main aspects

- individualized radiation doses on the basis of gene-expression profiles that reflect tumor & normal tissue radiosensitivity
- targeted agents impact cellular damage and repair pathways thereby altering the response patterns of radiotherapy
- nearly all our experience in non-curative, metastatic populations