Beyond The Guidelines: Urologic Oncology Investigators Provide Perspectives on the Optimal Management of Prostate Cancer

Clinical Investigator Survey

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Prostate Cancer Survey Respondents

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MODULE 1: Management Approaches for Nonmetastatic Prostate Cancer

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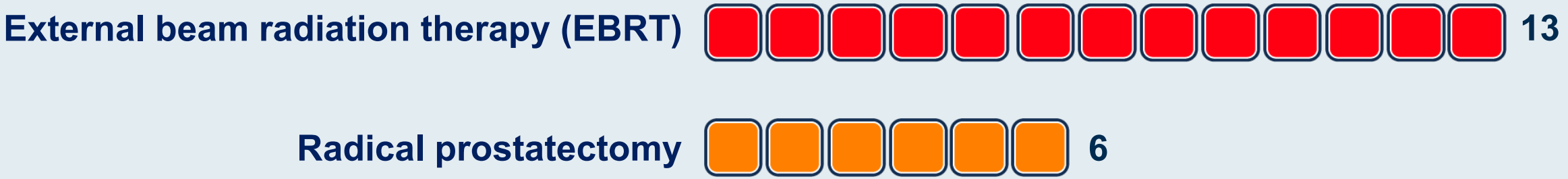
A 66-year-old man presents with Gleason 8 (4 + 4) prostate adenocarcinoma (PSA 12.7 ng/mL). A bone scan is negative. CT imaging reveals uptake in the pelvic nodes. What approach to primary therapy would you most likely recommend for this patient?



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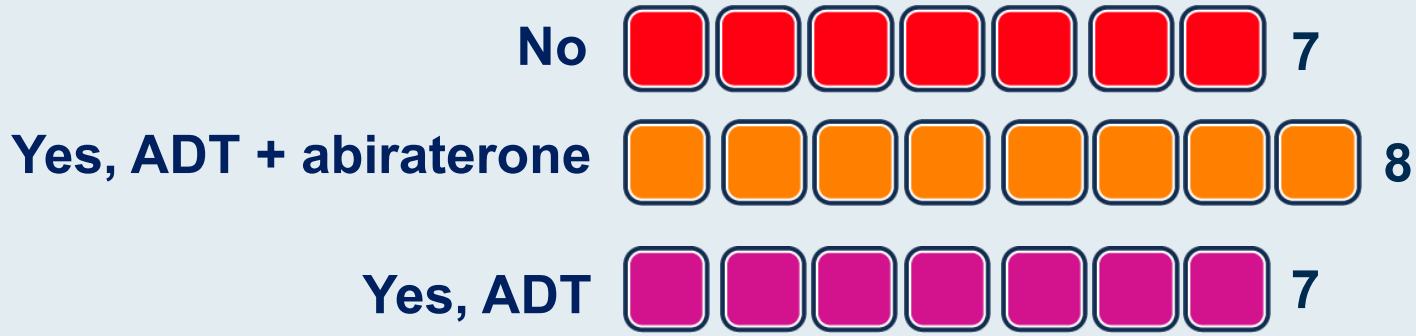
A 61-year-old man presents with Gleason 8 (4 + 4) prostate adenocarcinoma (PSA 8 ng/mL) and undergoes RALP (robotically assisted laparoscopic prostatectomy). Final pathology reveals T3bN1 disease with 2/10 positive lymph nodes. Regulatory and reimbursement issues aside, would you recommend hormonal therapy at this point?



How long would you continue the hormonal therapy?

- 6 months
- 12 months
- 18 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months minimum
- At least 24 months
- 24-36 months

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A 64-year-old man underwent a radical prostatectomy 5 years ago for Gleason 9 (4 + 5) prostate adenocarcinoma (PSA 4.8 ng/mL). Pathology showed T2N0 disease with negative margins. His postsurgical PSA was initially undetectable but rose to 0.2 ng/mL. He undergoes salvage EBRT (45 Gray in 25 fractions) to the pelvic and prostate fossa and receives 6 months of ADT. His PSA rises to 0.23 ng/mL. Bone and CT scans are negative. PSMA PET reveals a lesion in the right anterior first rib. In addition to radiation therapy, regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?

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MODULE 2: Optimizing the Care of Patients with Metastatic Hormone-Sensitive Prostate Cancer (mHSPC)

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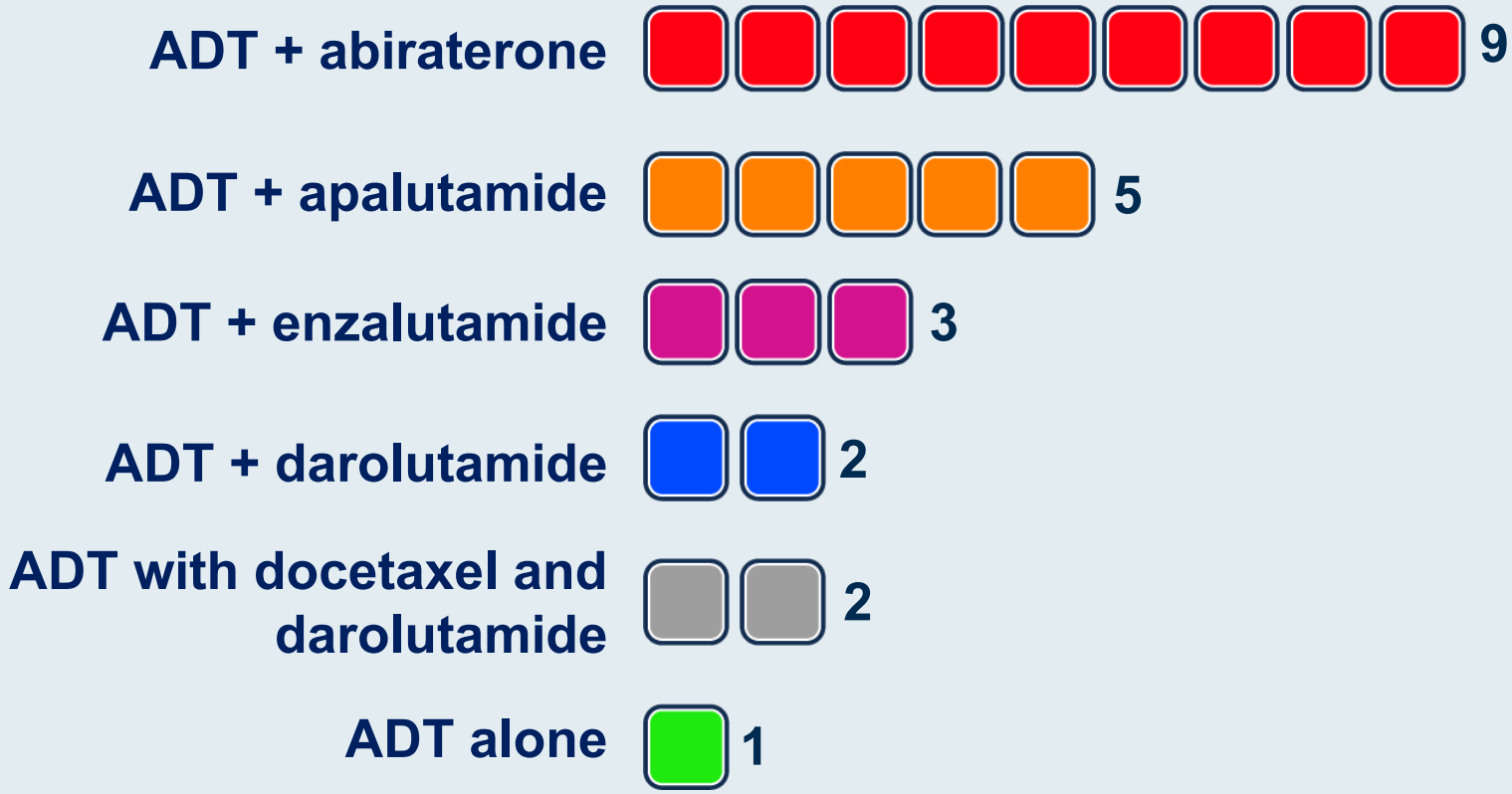
In general, which systemic therapy would you recommend for a 65-year-old patient presenting de novo with Gleason 8 prostate cancer and 3 asymptomatic bone metastases?



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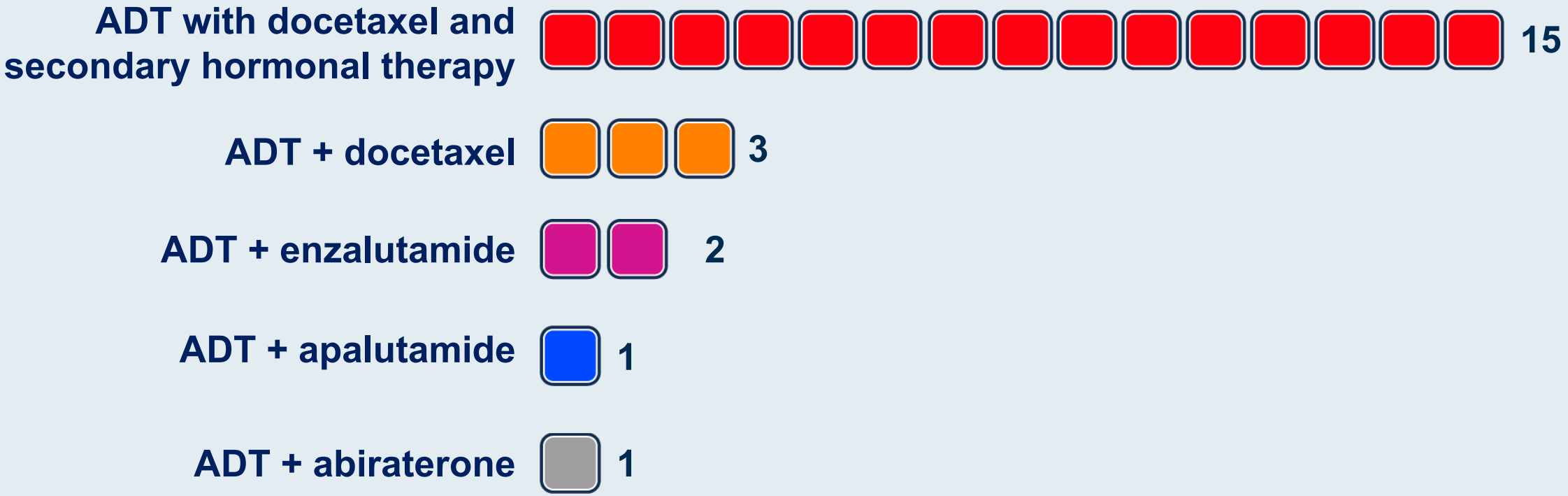
In general, which systemic therapy would you recommend for a 65-year-old patient presenting de novo with Gleason 8 prostate cancer and multiple bone and liver metastases?



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For a patient with metastatic castration-sensitive prostate cancer (CSPC) for whom you have elected to use a novel antiandrogen therapy in combination with ADT (without docetaxel), do you have a preferred agent?

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A 79-year-old man presents with high-volume metastatic CSPC. His pretreatment PSA is 173.2 ng/mL. CT and bone scans show widespread osseous metastases involving the skull, thoracic spine, proximal humerus, ribs, sternum and lumbar spine. Regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?

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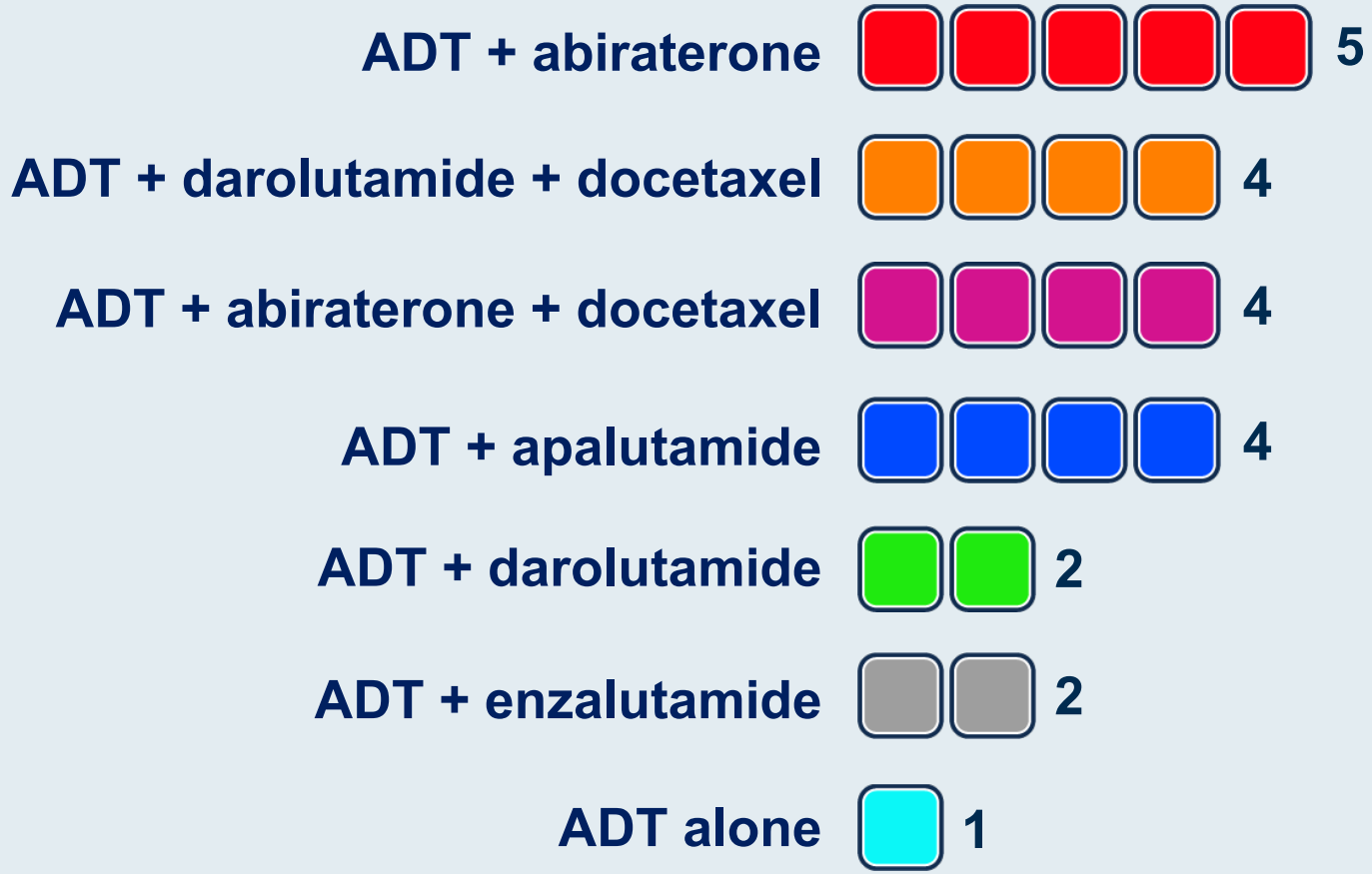
An 84-year-old man underwent robotic prostatectomy 11 years ago for pT3b, N0, Gleason 9 (4 + 5) prostate cancer. The patient was lost to follow-up and returned to the office several years later with a PSA of 80.82 ng/mL. CT scan reveals thoracolumbar and pelvic bone metastases. A bone scan shows additional extensive bony metastases. Regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?



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MODULE 3: Therapeutic Considerations for Patients with Newly Diagnosed Metastatic CRPC (mCRPC)

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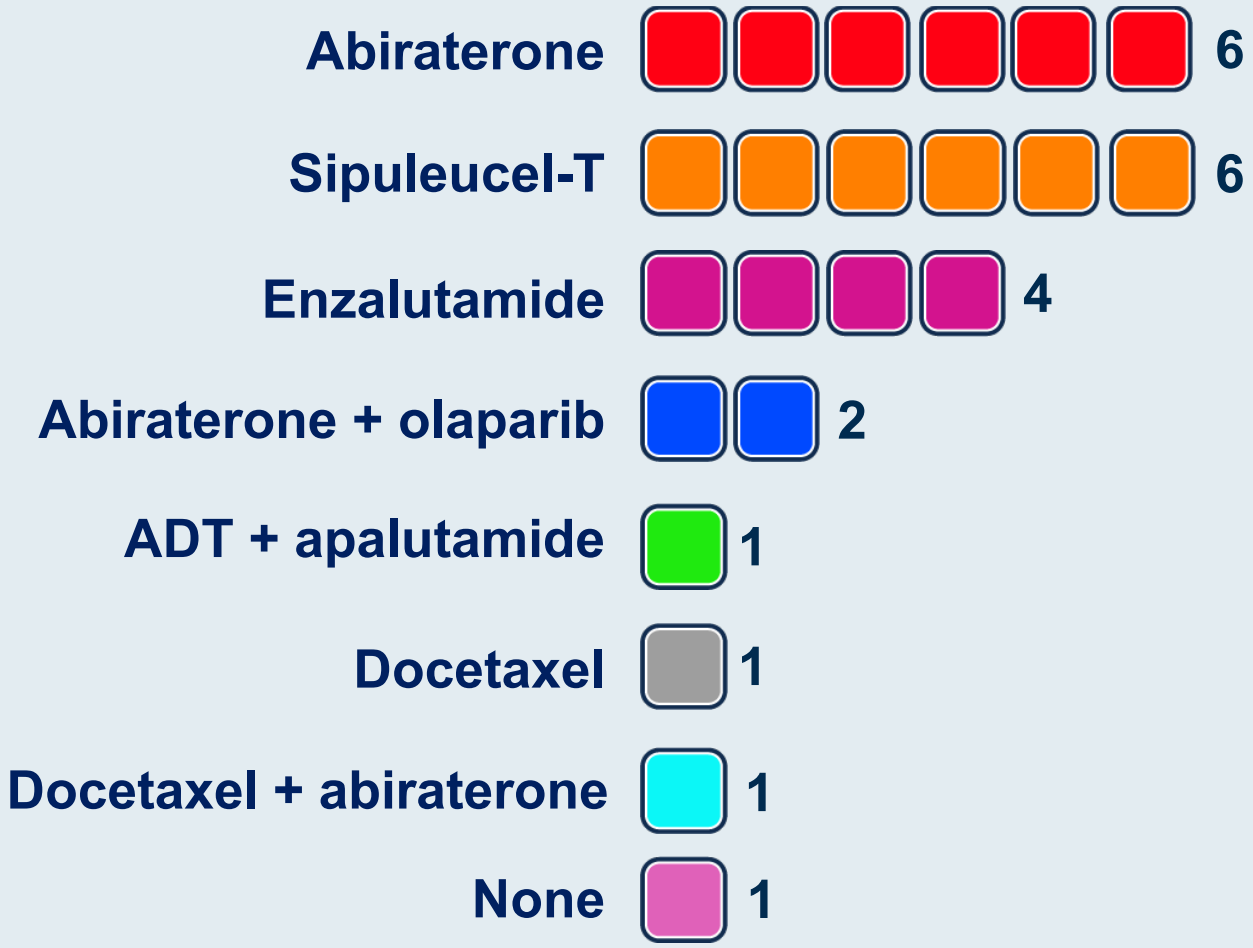
A 65-year-old man receiving ADT for M0 disease after radical prostatectomy is found to have asymptomatic bone metastases. Genetic testing is negative for homologous recombination repair (HRR) mutations. Regulatory and reimbursement issues aside, which systemic treatment would you most likely recommend?



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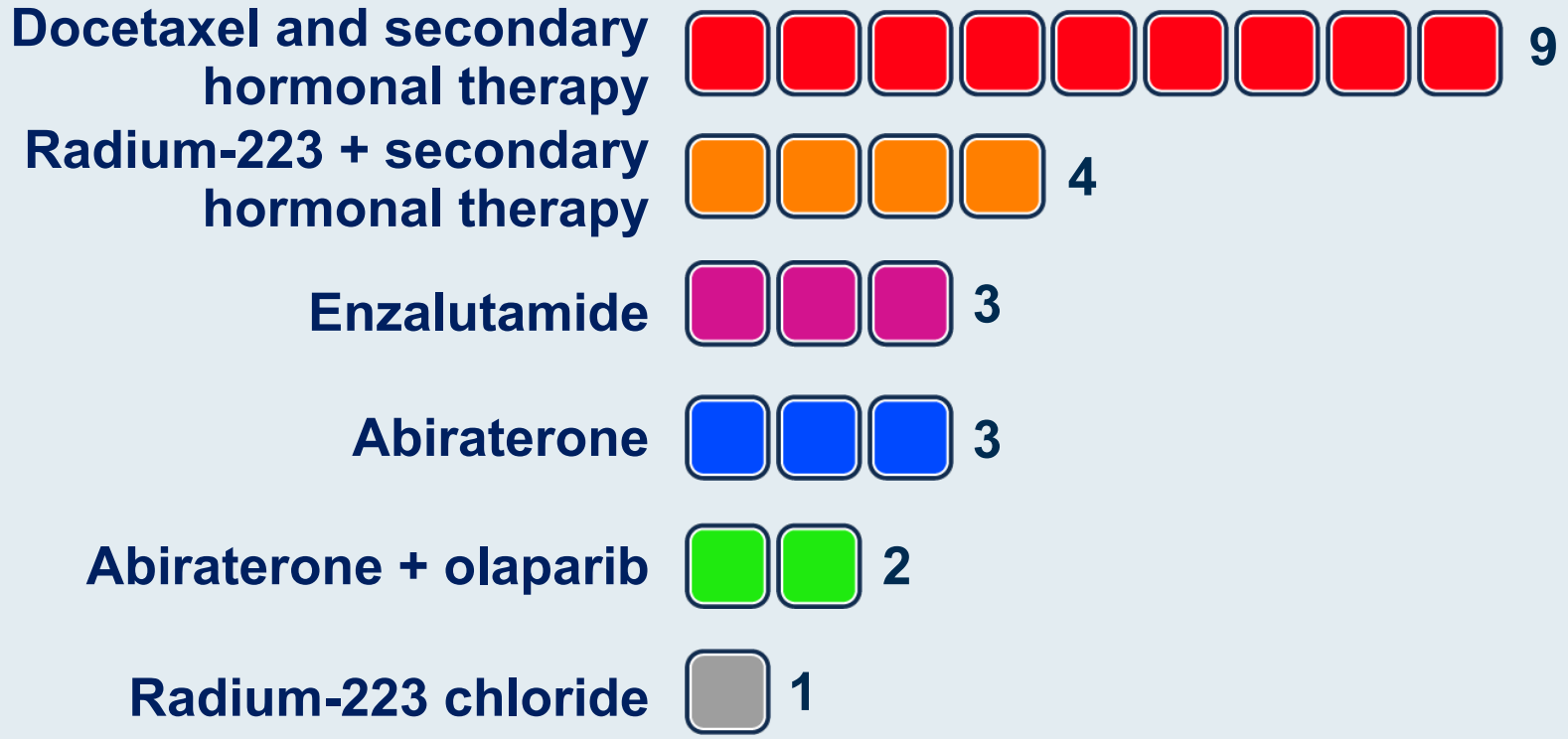
A 65-year-old man receiving ADT for M0 disease after radical prostatectomy is found to have widespread, moderately symptomatic bone metastases. Genetic testing is negative for HRR mutations. Regulatory and reimbursement issues aside, which systemic treatment would you most likely recommend?



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MODULE 4: Contemporary Management of mCRPC in Patients Harboring an HRR Gene Alteration

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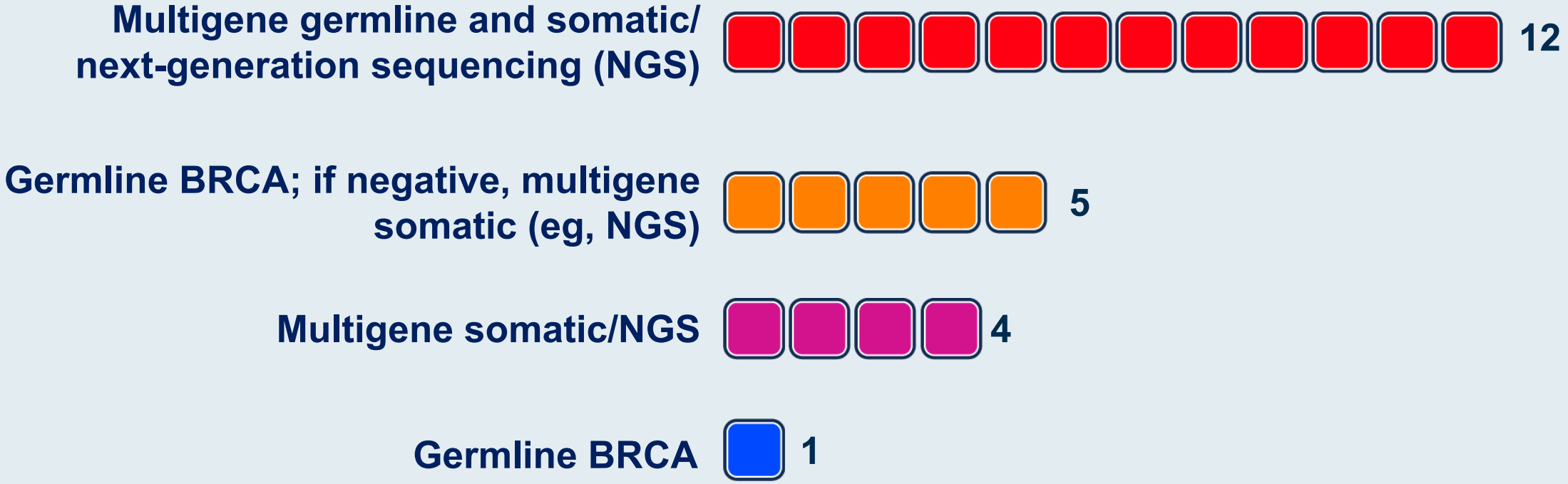
In general, what is the optimal approach to mutation testing for possible use of a PARP inhibitor for a patient with mCRPC?



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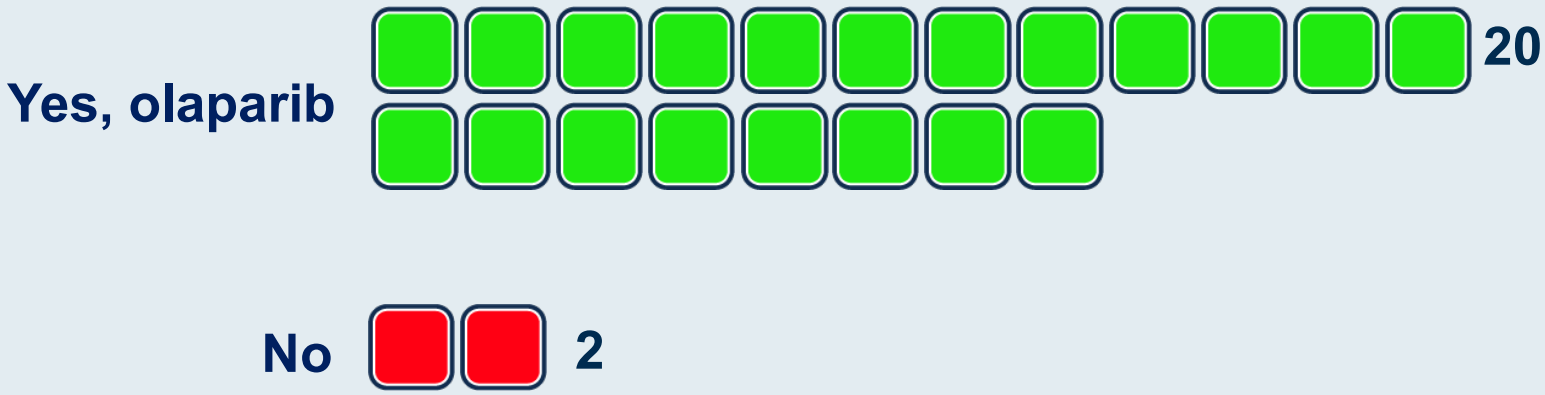
Regulatory and reimbursment issues aside, for patients with mCRPC and a germline BRCA mutation to whom you are planning to administer a PARP inhibitor, do you have a preference as to which one?



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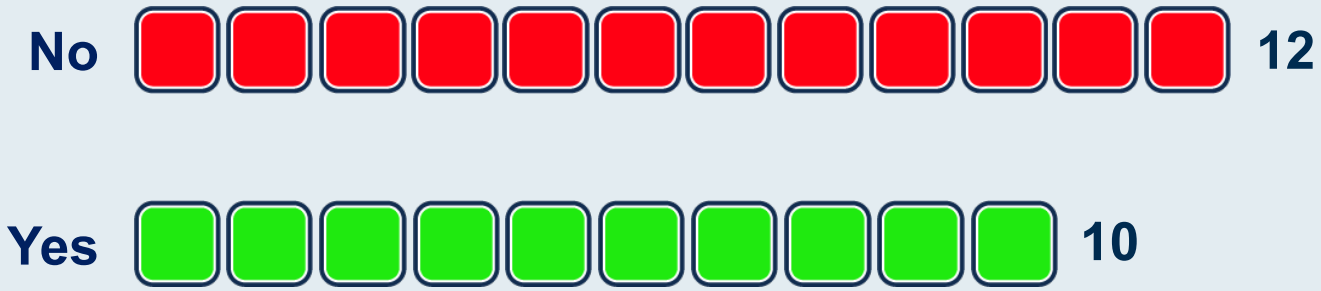
In general, when adminstering a PARP inhibitor to a patient with metastatic prostate cancer, do you use prophylactic antiemetic/gastrointestinal medication?



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A 72-year-old man presented with Gleason 8 (4 + 4) prostate adenocarcinoma 2 years ago. CT and bone scans were negative. He underwent proton beam therapy with 2 years of ADT planned. The PSA nadir was 0.1 ng/mL, and PSA rose to 11 ng/mL 1 year later. CT scan shows uptake in a lung nodule, a retroperitoneal node and sclerosis in bones. A bone scan is negative. Genetic testing reveals a BRCA2 germline mutation. Family history is negative for other cancers. Regulatory and reimbursement issues aside, which systemic treatment would you most likely recommend?

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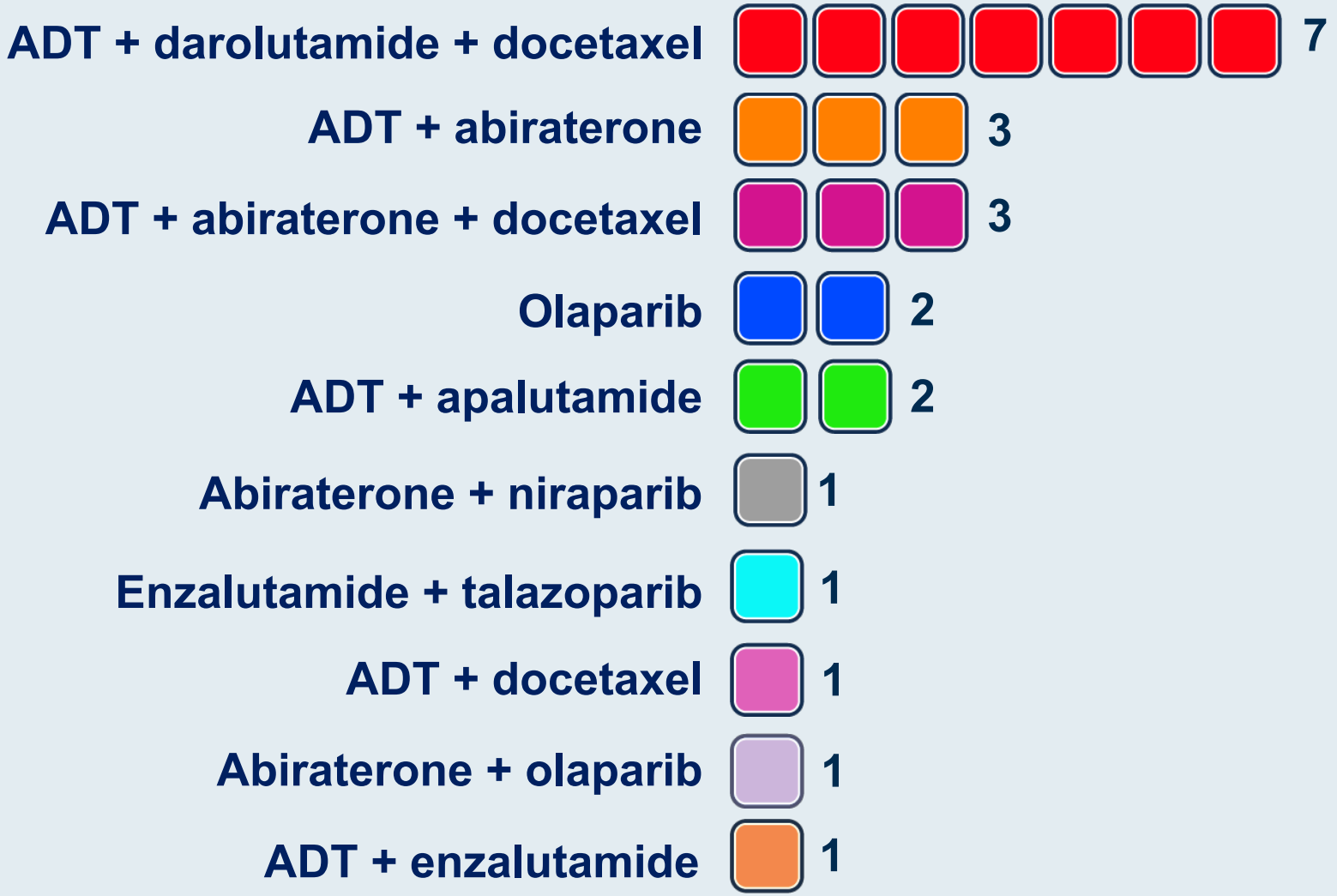
A 67-year-old man presents with Gleason 9 (5 + 4) prostate adenocarcinoma (PSA 12 ng/mL). CT and bone scans show spine and pelvis lesions and small positive lymph nodes in the pelvis. Germline testing is negative, but somatic testing from biopsy reveals a BRCA1 mutation. Family history includes the patient's mother having breast cancer. Regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?



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An 84-year-old man underwent robotic prostatectomy 11 years ago for pT3b, N0, Gleason 9 (4 + 5) prostate cancer. The patient was lost to follow-up and returned to the office several years later with a PSA of 80.82 ng/mL. CT scan reveals thoracolumbar and pelvic bone metastases. A bone scan shows additional extensive bony metastases. Genetic testing is positive for a BRCA2 mutation. Regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?

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MODULE 5: Current and Emerging Strategies in the Treatment of Recurrent mCRPC

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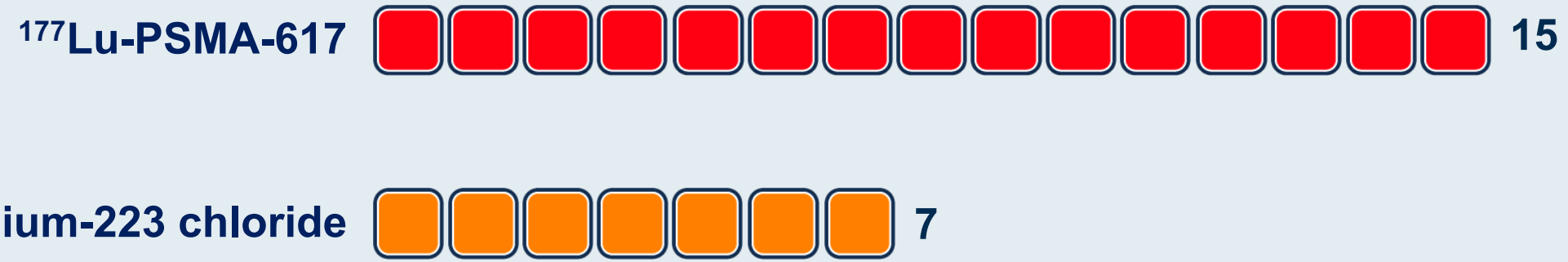
For a 71-year-old man with PSMA-positive bone-only mCRPC who has experienced disease progression on multiple lines of systemic therapy, including ADT, enzalutamide and sipuleucel-T, which of the following therapies would you generally recommend first?



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To what extent do you believe the dry mouth associated with ^{177}Lu-PSMA-617 is problematic for patients?

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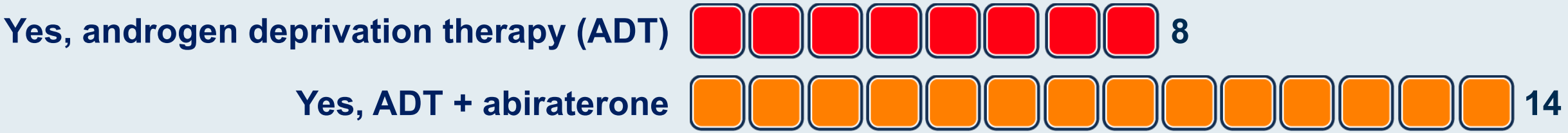
Additional Survey Findings

A 66-year-old man presents with Gleason 8 (4 + 4) prostate adenocarcinoma (PSA 12.7 ng/mL). A bone scan is negative. CT imaging reveals uptake in the pelvic nodes. He elects to undergo EBRT. Regulatory and reimbursement issues aside, would you recommend hormonal therapy at this point?



How long would you continue the hormonal therapy?

- 2 months before and 8 months after
- 4 months
- 6 months
- 12 months
- 18 months
- 18 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24-36 months
- 36 months

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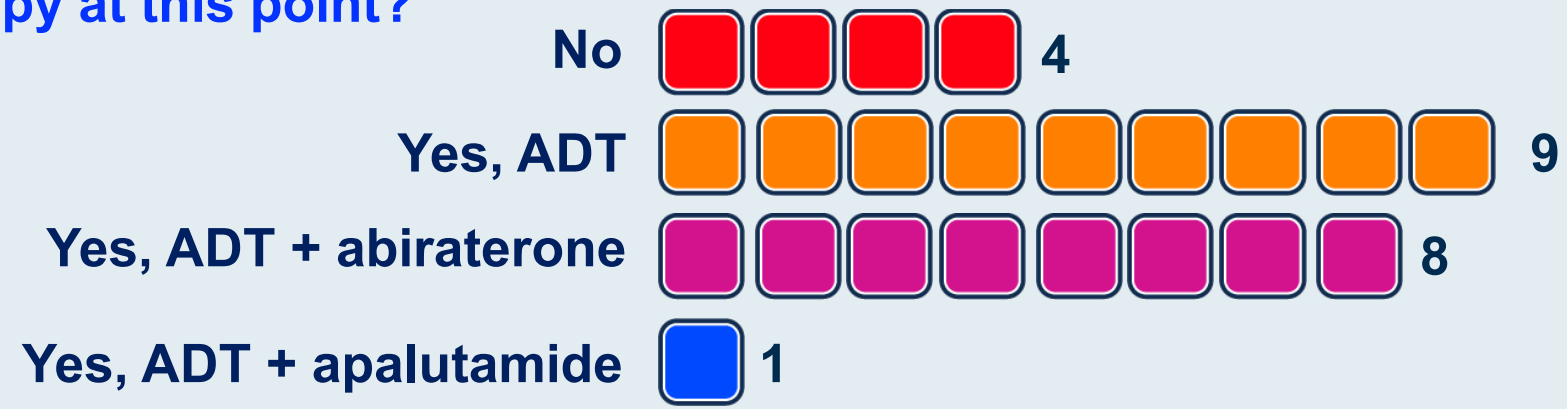
A 59-year-old man presents with Gleason 7 (4 + 3) prostate adenocarcinoma (PSA 11 ng/mL) and undergoes radical RALP. His PSA begins to rise slowly after surgery: 0.1 ng/mL, 0.15 ng/mL, 0.21 ng/mL and is now 0.5 ng/mL. Conventional imaging is negative, but PSMA PET is positive in the prostate bed and pelvic nodes. Radiation therapy is planned. Regulatory and reimbursement issues aside, would you recommend hormonal therapy at this point?



How long would you continue the hormonal therapy?

- 9 months
- 12 months
- 21 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24 months
- 24-36 months

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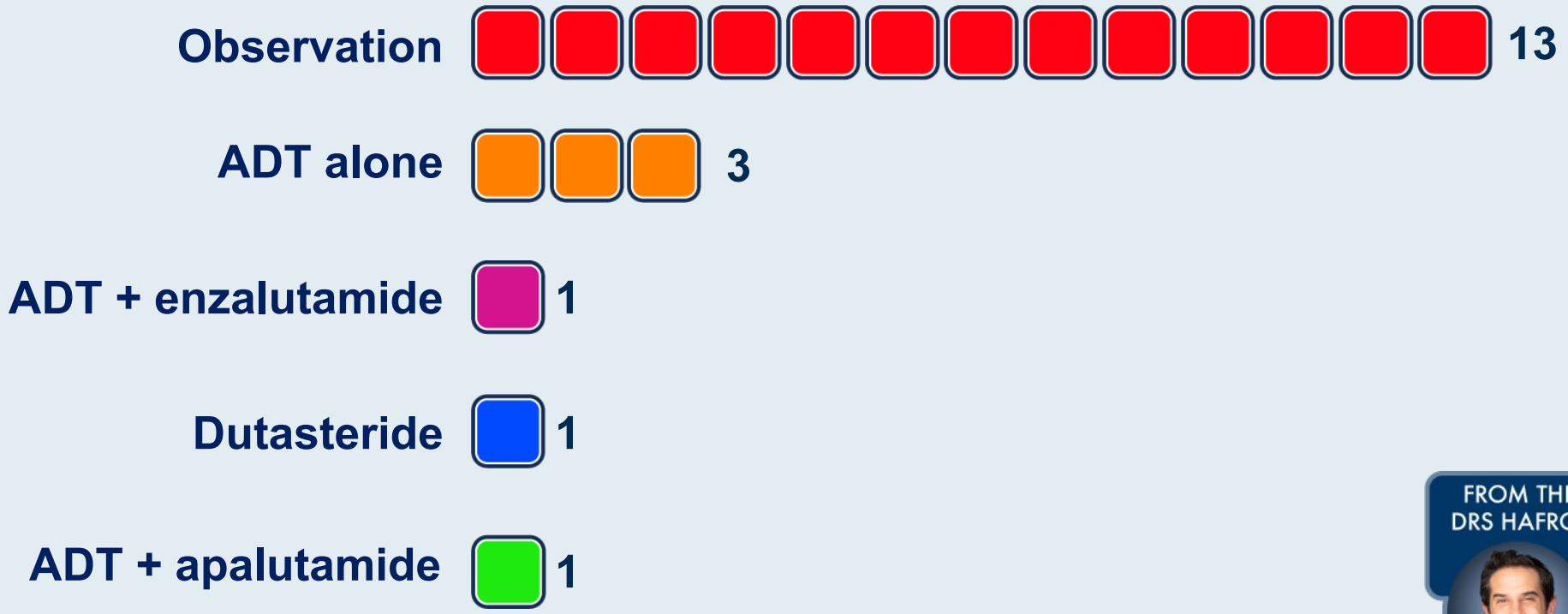
A 76-year-old man with Gleason 7 (3 + 4) T2c prostate adenocarcinoma underwent radical prostatectomy with negative margins 12 years ago. Postsurgical PSA was undetectable but has recently increased to 0.18 ng/mL, then 0.19 ng/mL, with a 7-month doubling time. PSMA PET imaging is negative. Regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?



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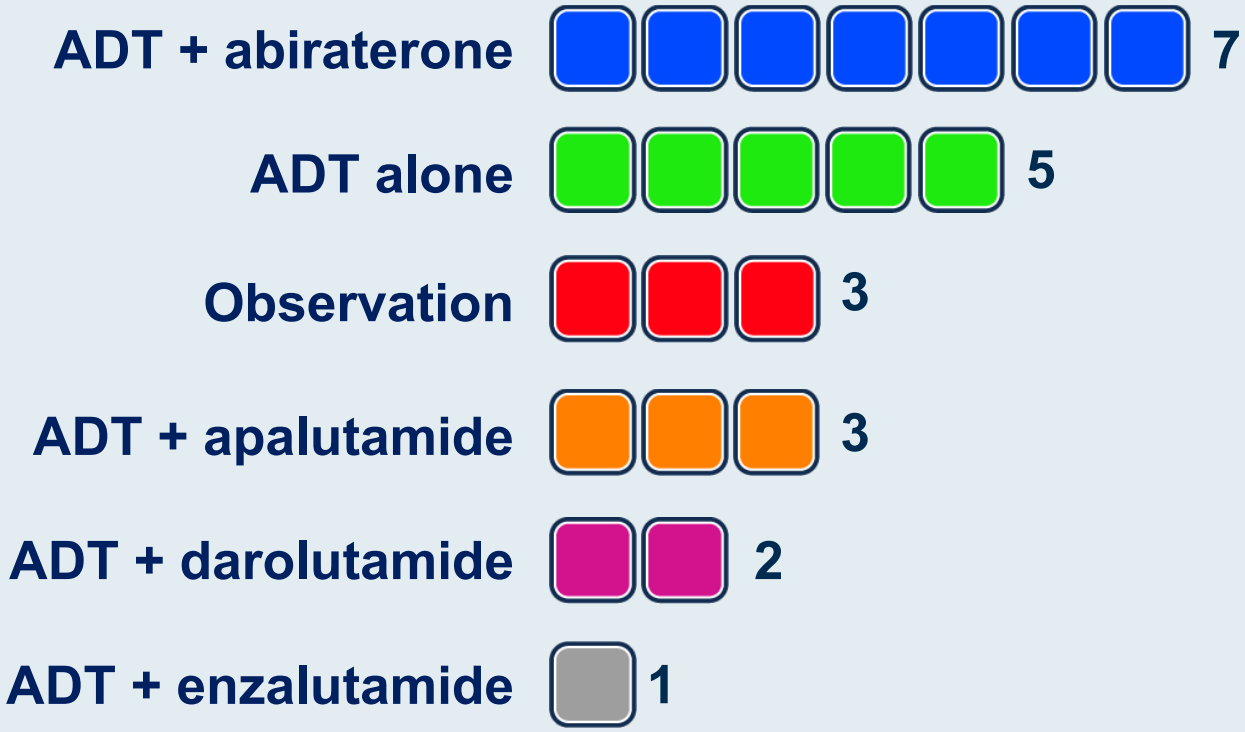
An 85-year-old man with Gleason 6 (3 + 3) T1cNxMx prostate adenocarcinoma (PSA 4.2 ng/mL) undergoes stereotactic EBRT (40 Gray in 5 fractions). The PSA nadir is 0.48 ng/mL. He has recently experienced a successive rise in PSA, which is now 4 ng/mL. PSMA PET shows a PSMA-avid lesion in the right iliac lymph nodes. In addition to radiation therapy, regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?



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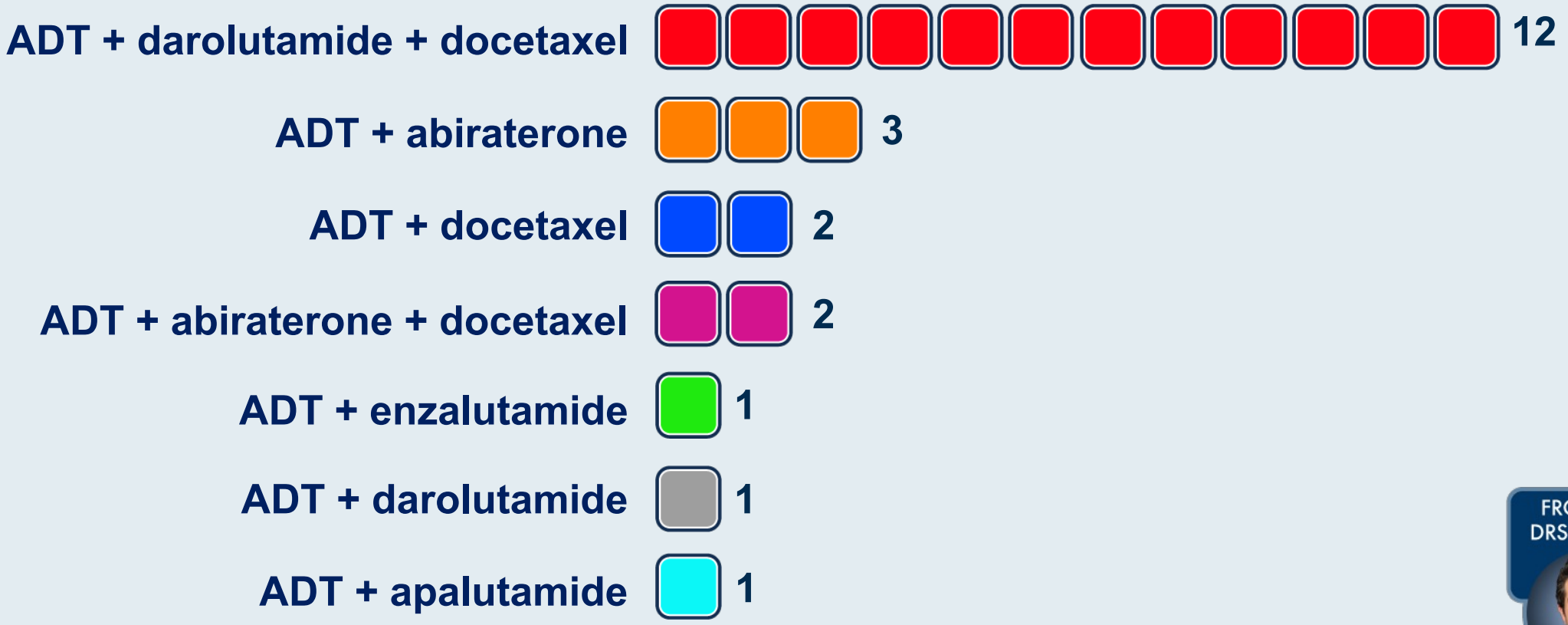
A 65-year-old man presents with acute urinary retention and undergoes TURP (transurethral resection of the prostate). Pathology shows Gleason 9 (4 + 5) involving 90% of the prostate chips. His pretreatment PSA was 7.41 ng/mL. PSMA PET scan reveals widespread osseous and soft tissue metastases. There is no evidence of visceral metastases. Regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?



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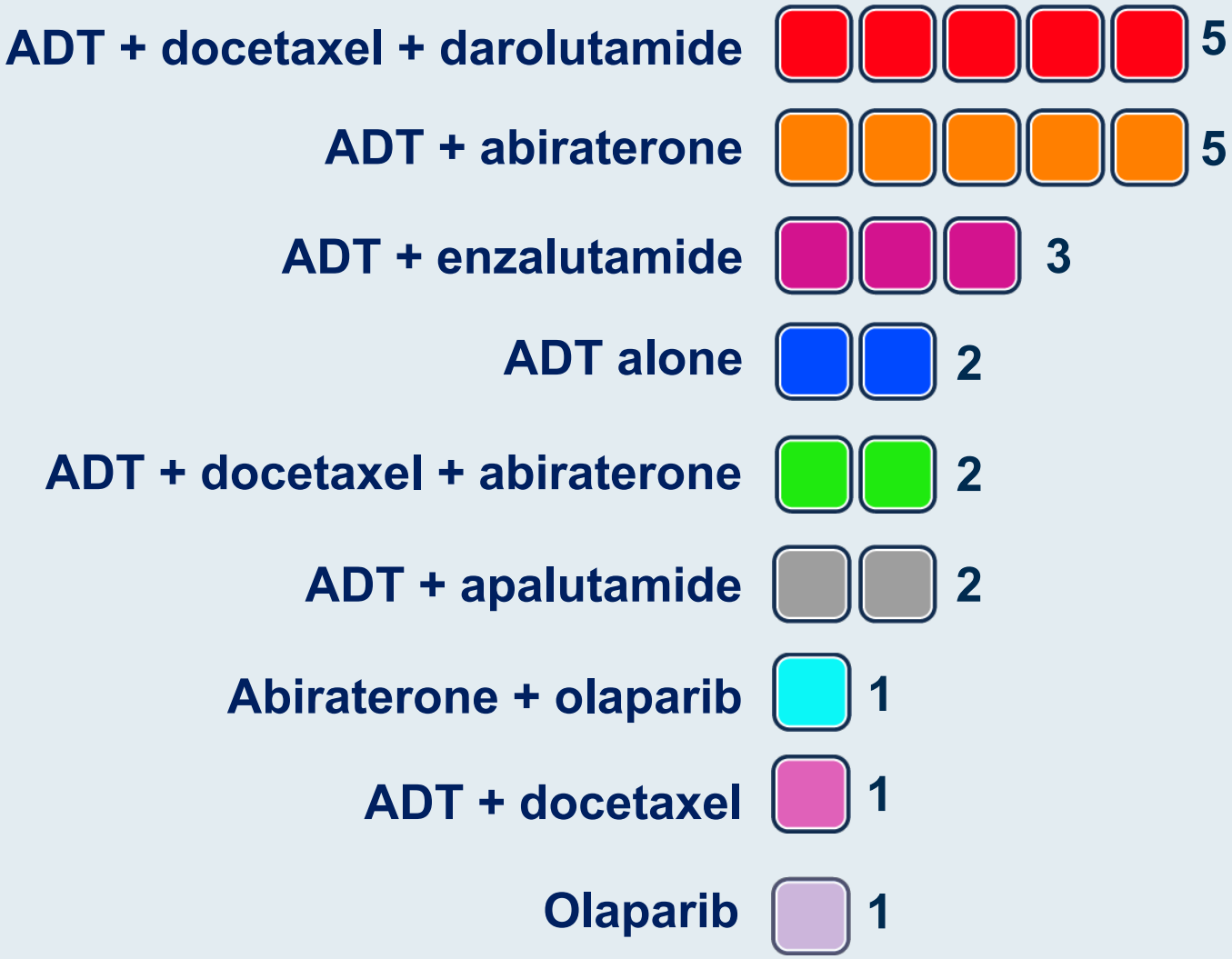
In general, what is your preferred initial systemic therapy for a 65-year-old man with de novo metastatic prostate cancer and minimally symptomatic bone metastases who has a BRCA2 germline mutation?



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For the patient in the previous question, at what point, if any, would you use a PARP inhibitor?

- mHSPC (off label)
- At progression to mCRPC
- At first sign of mCRPC
- mCRPC
- Would base on PSA and radiographic response
- With progression (PSA or otherwise)
- Progression
- CRPC progression
- Progression
- Progression
- Rise in PSA or PSADT <7 mo
- Upon progression
- On progression
- Now
- Progression to mCRPC
- After progression to mCRPC
- After failing first line
- mCRPC
- Progression
- mCRPC
- After androgen deprivation stops working
- When fail 1st-line ADT

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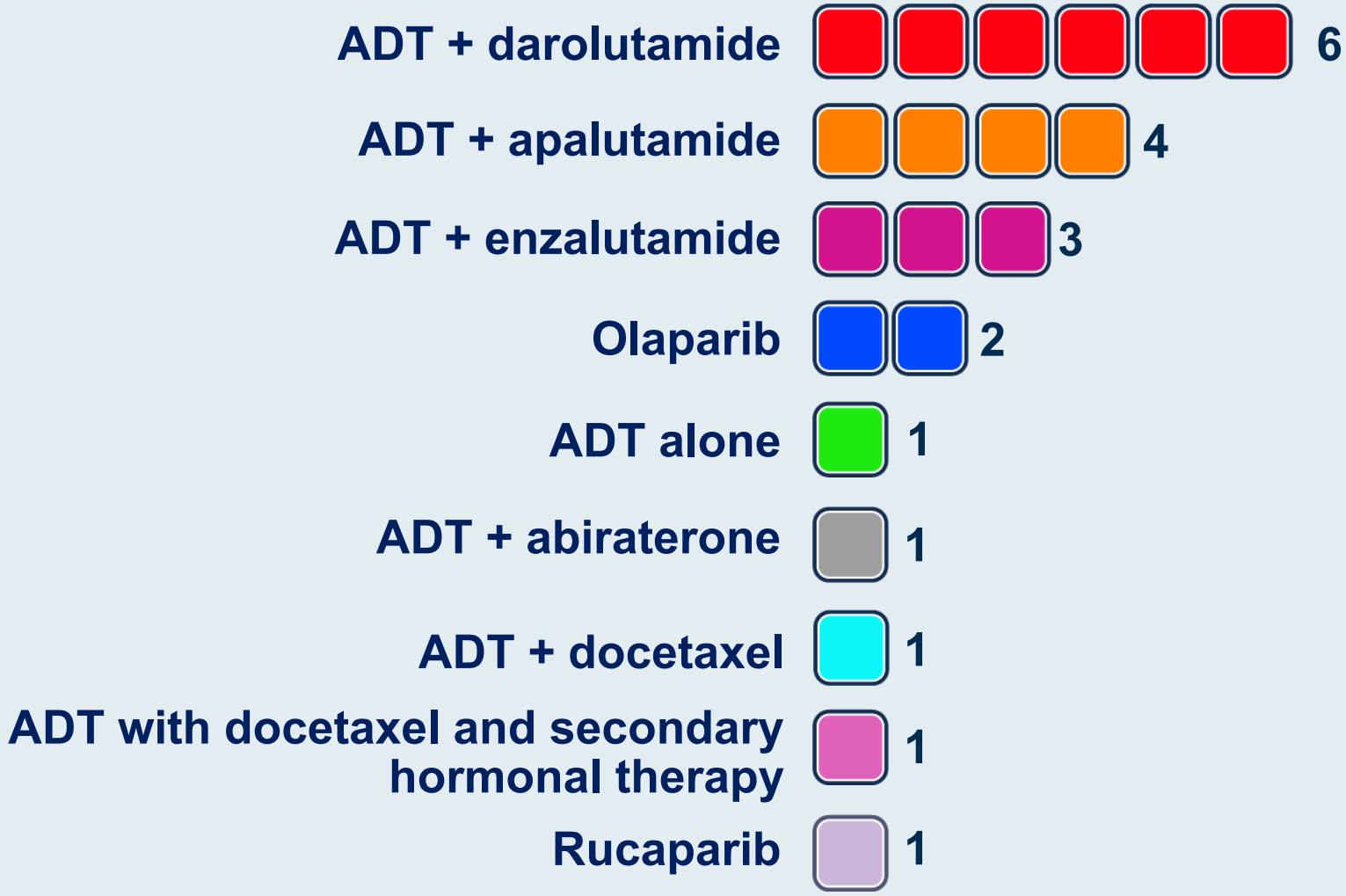
Which systemic therapy would you typically use for an 80-year-old patient with a history of poorly controlled hypertension and a BRCA2 germline mutation presenting de novo with Gleason 8 prostate cancer and 3 asymptomatic bone metastases?



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For the patient in the previous question, at what point, if any, would you use a PARP inhibitor?

- CRPC
- At progression to mCRPC
- At mCRPC
- mCRPC
- Predicated on response to first line
- With PSA or other progression
- Progression
- CRPC progression
- In the best case, at progression
- Symptomatic progression
- Immediately
- Upon progression
- Failure of therapy or 2L
- Now
- Progression
- After progression to mCRPC
- May consider as first line
- CRPC
- Progression
- mCRPC
- ADT and 2nd generation antiandrogen is ineffective
- When fails 1st-line ADT

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What is the best clinical response you have observed in a patient with metastatic prostate cancer receiving a PARP inhibitor?

- PSA decline and objective radiologic response
- Good partial response
- Complete response
- Drop in PSA and no progression
- Visceral organ disease response
- Reduction in node volume
- PR
- Stable and PSA drop below 2
- Radiographic disappearance of bone mets
- 8 months
- PR
- Improving PSA levels, stable imaging of bony mets
- In collaboration with colleagues, reported benefit of ~3 mo
- PSA undetectable, symptomatic improvement, PR on scans
- PR
- PR
- PSA decrease from 88 ng/mL to 6 ng/mL

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RTP RESEARCH TO PRACTICE

What is the most problematic side effect you have observed in a patient with metastatic prostate cancer receiving a PARP inhibitor?

- MDS
- Nausea requiring treatment interruptions and dose reductions
- Grade 4 thrombocytopenia
- Dyspepsia, fatigue
- GI complications (nausea/vomiting/pain)
- Anemia
- GI
- Anemia, fatigue, nausea
- Nausea
- Anemia
- Nausea, anemia
- Anemia
- Hypertension
- Anemia, fatigue
- Fatigue
- GI toxicity
- MDS
- Anemia

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A 66-year-old man received radiation therapy with ADT 3 years ago for Gleason 8 (4 + 4) prostate adenocarcinoma. 1 year later his PSA rose to 4.3 ng/mL. ^{18}F-fluciclovine PET shows 1 positive mediastinal node. Somatic and germline testing are ordered on the primary biopsy specimen: Somatic findings include BRCA2 mutation, PMS2 mutation (mismatch repair mutation), tumor mutation burden 17 mut/MB and high microsatellite instability. Regulatory and reimbursement issues aside, which systemic treatment would you most likely recommend?

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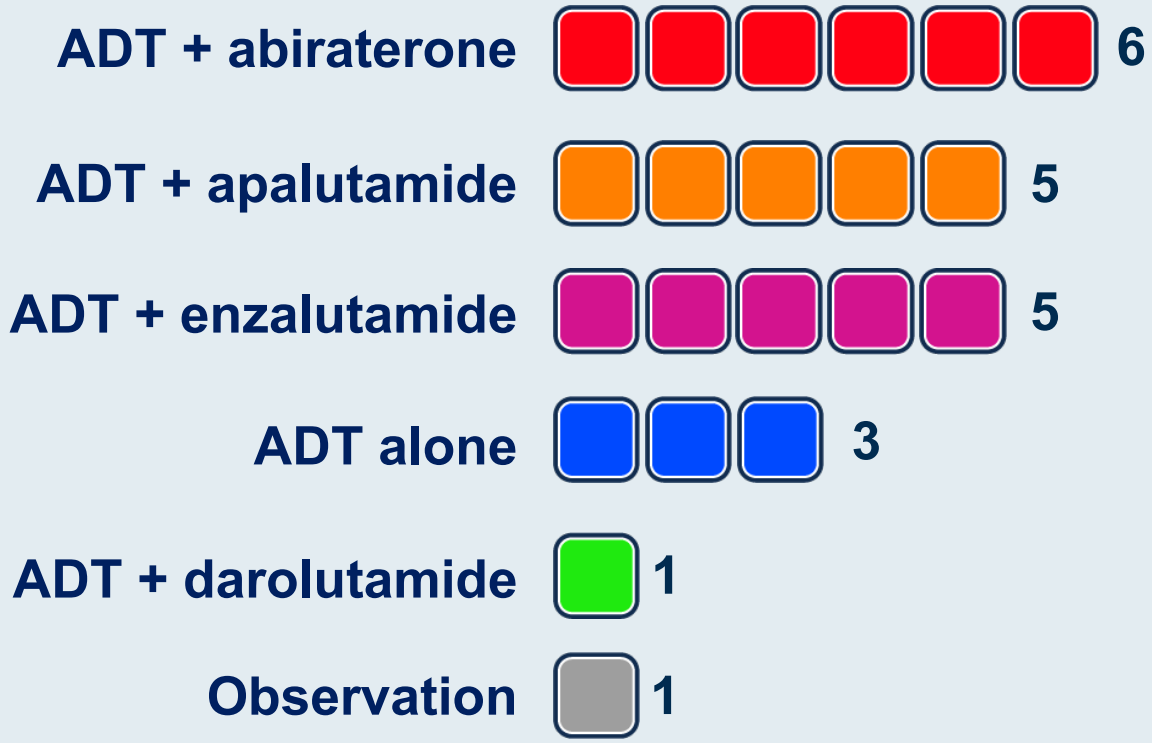
A 64-year-old man underwent a radical prostatectomy 5 years ago for Gleason 9 (4 + 5) prostate adenocarcinoma (PSA 4.8 ng/mL). Pathology showed T2N0 disease with negative margins. His postsurgical PSA was initially undetectable but rose to 0.2 ng/mL. He undergoes salvage EBRT (45 Gray in 25 fractions) to the pelvic and prostate fossa and receives 6 months of ADT. His PSA rises to 0.23 ng/mL. Bone and CT scans are negative. PSMA PET reveals a lesion in the right anterior first rib. The patient is found to have a BRCA2 germline mutation. In addition to radiation therapy, regulatory and reimbursement issues aside, what would be your most likely treatment recommendation?



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For the patient in the previous question, at what point, if any, would you initiate a PARP inhibitor?

- CRPC
- At progression to mCRPC
- At mCRPC
- mCRPC
- Depends on imaging progression and response to ADT and ARTA
- With PSA or other progression
- Progression on treatment
- CRPC
- Rising PSA again after radiation therapy
- Progression
- Rise in PSA or PSADT <7 mo
- Upon progression
- On progression today, in combination when approved
- With XRT
- Progression
- After progression on AR/AFT 1st line
- After failing first line
- mCRPC
- Progression
- mCRPC
- CRPC on 2nd-generation antiandrogen
- When he fails 1st-line ADT

If you elected to use a PARP inhibitor for this patient, which agent would you use?

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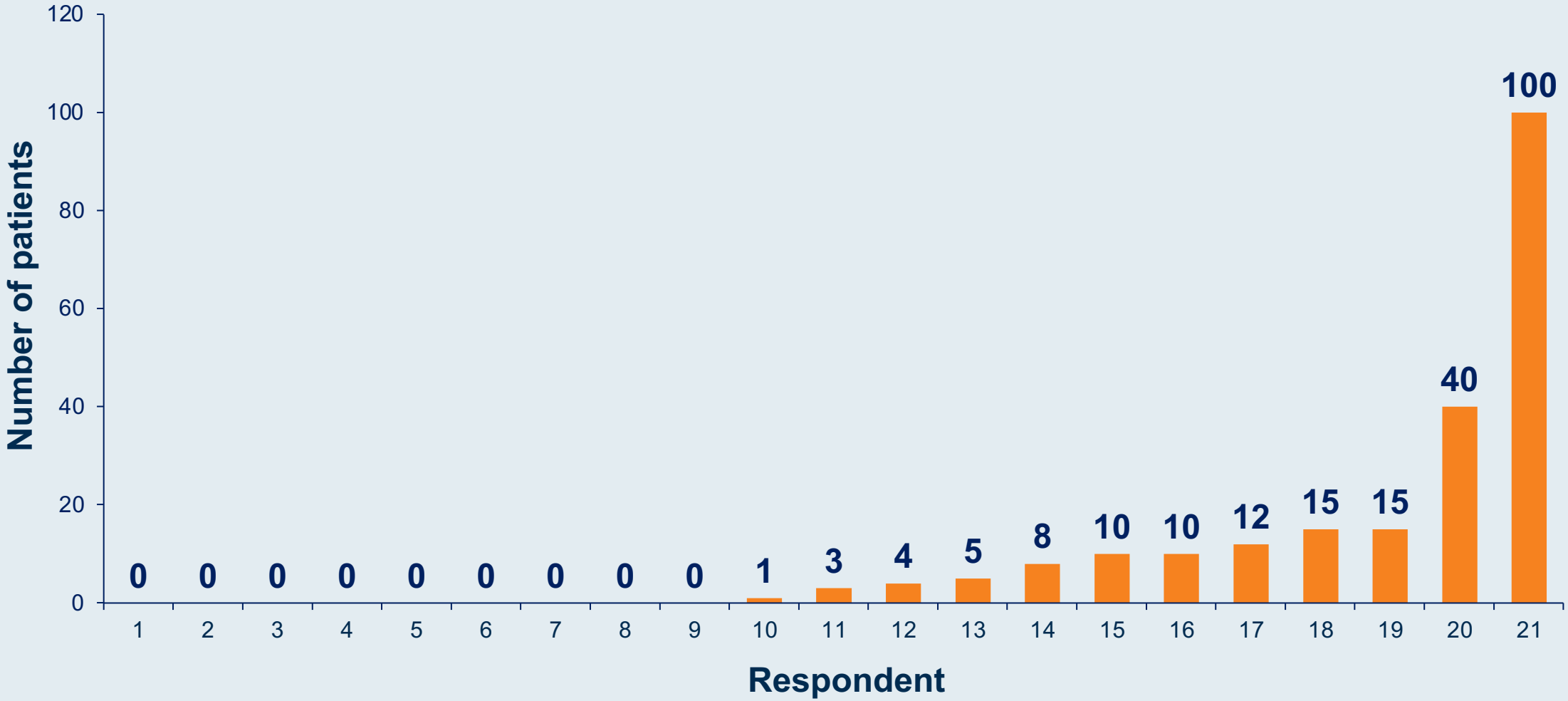
Approximately how many of your patients with metastatic prostate cancer have received ^{177}Lu-PSMA-617 either on or off protocol?



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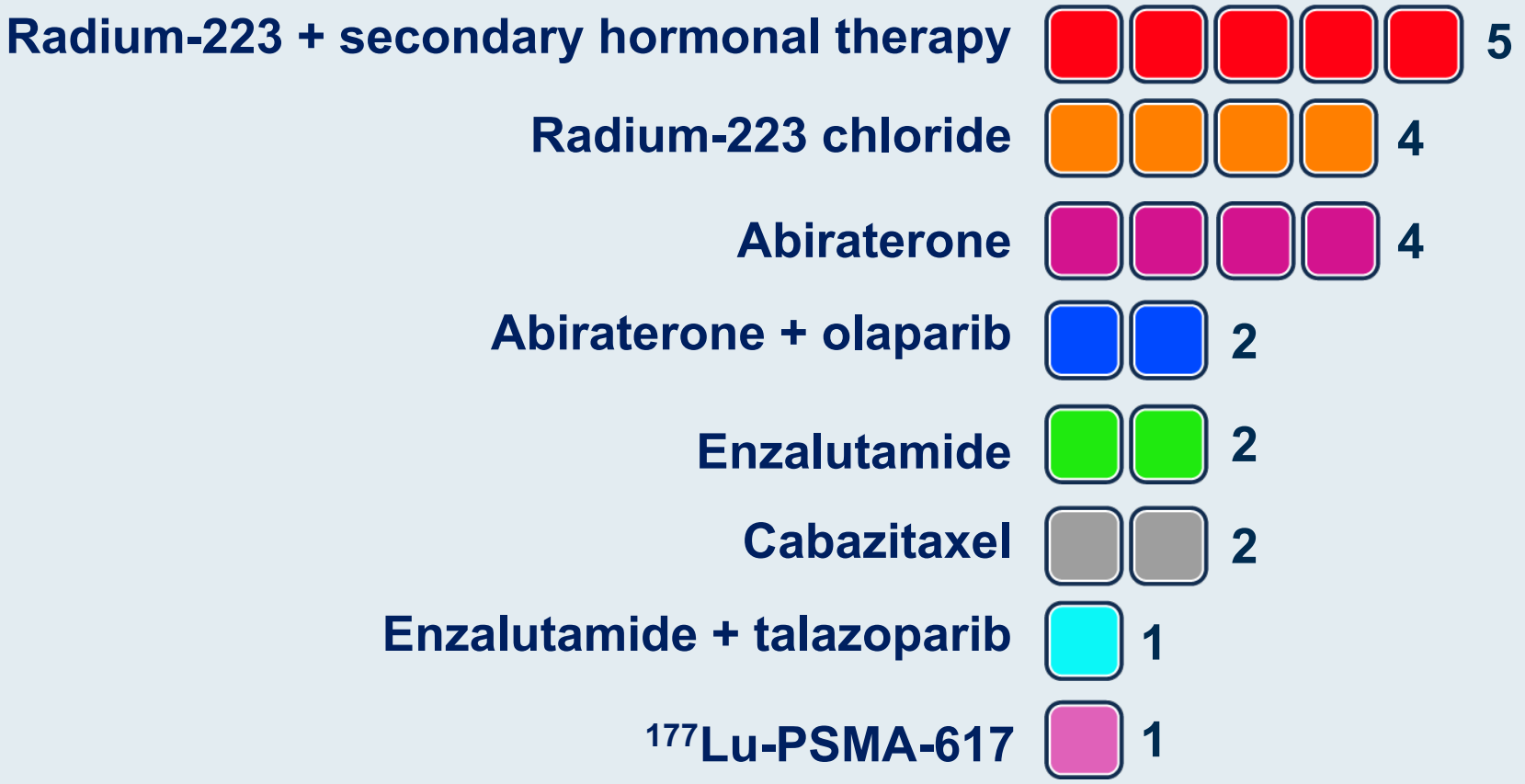
A 73-year-old man was initially diagnosed with prostate cancer and followed with active surveillance for approximately 14 years, when his PSA began rising slowly to 5.0 ng/mL. Within the next year, his PSA rose sharply to 71.71 ng/mL. Prostate biopsy revealed 11/12 cores positive for Gleason 8 (4 + 4) adenocarcinoma. A bone scan showed metastases within the axial skeleton and bilateral proximal femurs. CT revealed a large liver lesion, which biopsy proved to be consistent with the prostate primary. The patient was started on ADT and docetaxel. Approximately 1 year after completing chemotherapy he develops high-volume bone metastases. Regulatory and reimbursement issues aside, which systemic treatment would you most likely recommend?



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