Influence of an international consensus conference on practice patterns in advanced prostate cancer

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Letter to the Editor

Research Letter

The St. Gallen Advanced Prostate Cancer Consensus Conference (APCCC) convened in 2017 to provide expert consensus on areas of advanced prostate cancer (APC) management where there is limited or conflicting evidence [1]. We administered 57 questions as a pre- and post-conference survey to all attendees who were not part of the panel. These multiple choice questions were selected from the 150 questions for expert panelists at APCCC 2017. Consensus was declared if ≥75% participants who did not "abstain" or declare themselves "unqualified" selected the same answer [1].

From 02/2017-04/2017, matched responses from 120 non-panel-member attendees before and after APCCC 2017 were compared to identify changes in attendee treatment preferences in APC (Supplemental Table 1). Attendees reached a consensus on pre- and post-conference surveys on 9/57 questions (Supplemental Table 2). A change from a <75% consensus vote to ≥75% vote (or vice-versa) was seen in 3 key topics (Supplemental Figures 1-2): first-line treatment option for patients with metastatic castrate-resistant prostate cancer (mCRPC) progressing on the docetaxel they had in the castrate-naïve setting; duration of osteoclast-targeted therapy in mCRPC; and imaging modality for both mCRPC and metastatic castrate-naïve prostate cancer (mCNPC). Although participants did not reach a consensus on 48/57 (84%) questions in both pre- and post-conference questionnaires, there were 6 topics in which a ≥15% increase in the most popular category from pre- to post-conference surveys was observed (Table 1). Specifically, there were notable increases in certain answer options after than before the conference in topics on: genetic counseling; adding androgen-deprivation therapy (ADT) to salvage radiation; defining oligometastases; osteoclast-targeted therapy with ADT; and

multidisciplinary care. Participants disagreed with the panelists in majority votes on 11/57 questions (Supplemental Table 3).

This study is among the first to describe changes in healthcare provider preferences in APC management based on comparison of pre- and post-conference surveys following attendance of an international consensus conference providing state-of-the art lectures, interactive debates, and expert panelist voting. Recent investigations have highlighted that provider practices can be influenced by consensus conferences, including those that engage participants with interactive and mixed educational sessions incorporating web-based and/or mobile technology [2-5].

One important message conveyed by the APCCC 2017 expert panel and non-panel member surveys is the lack of consensus on many topics in APC management (Supplemental Table 4). Our work brings greater attention to topics where further study is warranted in APC management. Notably, we observed clear shifts in attendee responses where a loss of attendee consensus from pre- to post-conference or gain of attendee post-conference consensus when pre-conference consensus was not reached and increases in majority votes from pre- to post-conference occurred. Importantly, the majority of these changes between pre- and- post-conference participant responses followed voting for the same answer options by the majority of panelists, which provides proof that consensus conferences such as APCCC 2017 offer a unique learning experience. The next APCCC conference in 2019 is planned (apccc.org) and, again, a selection of key questions will be circulated pre- and post-conference to participants; we hope for an even better return rate of the surveys.

References

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Supplemental Figure 1. Topics Reaching Consensus ≥75% Votes on Post- but NOT Pre-Conference Surveys. mCRPC, metastatic castrate-resistant prostate cancer

Supplemental Figure 2. Topics Reaching Consensus ≥75% Votes on Pre- but NOT Post-Conference Surveys. mCNPC, metastatic castrate-naïve prostate cancer; mCRPC, metastatic castrate-resistant prostate cancer; CT, computed tomography; wbMRI, whole-body magnetic resonance imaging; PET/CT, positron emission tomography-computed tomography

Table 1. Topics Not Reaching Consensus ≥75% Votes on either Pre- and Post-Conference Surveys but with ≥15% Change in Votes from Pre- to Post-Conference Surveys[a]

Question	Answer	Panelists	Pre-conference	Post-conference
			No. (%)	No. (%)
Do you recommend genetic counseling and testing for men with newly diagnosed metastatic (M1) prostate cancer?	Yes, in a minority of selected patients	62%	58/118 (49.15%)	76/116 (65.52%)
At what confirmed PSA level do you recommend starting salvage radiation therapy in the majority of men with isolated rising PSA alone after prostatectomy?	0.2 ng/mL	44%	61/117 (52.14%)	82/116 (70.69%)
Do you recommend adding ADT in combination with salvage radiation therapy?	Yes, in the majority of patients	61%	34/117 (29.06%)	57/116 (49.14%)
What is your cut-off for the number of metastases to consider a patient as oligometastatic?	≤3 metastases	66%	56/115 (48.70%)	80/113 (70.80%)
Do you recommend drug therapy to prevent bone loss and/or fractures with denosumab or a bisphosphonate for osteoporosis prophylaxis in men with PC starting on ADT?	Only in patients with documented osteopenia or osteoporosis	70%	49/115 (42.61%)	67/113 (59.29%)
Do you recommend to routinely involve a multidisciplinary team for prevention or management of ADT-related adverse effects?	Yes, in the majority of selected patients (Panelists) Yes, in a minority of selected patients (Participants)	42%	29/115 (25.22%)	51/113 (45.13%)

[a]Based on answers with the majority vote
PSA, prostate-specific antigen; ADT, androgen deprivation therapy; PC, prostate cancer

Supplementary Table 1. Participant Background and Characteristics

Participant Characteristic (n=120)	Number(%)[a]	
Geographic Region		
Europe	91	(75.8%)
Asia-Pacific	13	(10.8%)
South America	10	(8.3%)
Africa/Middle East	4	(3.3%)
North America	2	(1. 7%)
Gender		
Male	89	(74.2%)
Female	31	(25.8%)
Profession		
Medical Oncologist	50	(41. 7%)
Urologist	49	(40.8%)
Clinical Oncologist	11	(9.2%)
Radiation Oncologist	8	(6. 7%)
Radiologist	1	(0.8%)
Other	1	(0.8%)
Professional Experience		
Consultant >10 years	75	(62.5%)
Consultant 5-10 years	24	(20.0%)
Consultant <5 years	16	(13.3%)
Trainee	4	(3.3%)
Other	1	(0.8%)
Setting of Practice		
Tertiary care/specialist hospital/referral hospital in high income country	65	(54.2%)
Tertiary care/specialist hospital/referral hospital in low-to-middle income country	21	(17.5%)
Local hospital in high income country	20	(16. 7%)
Private practice in high income country	7	(5.8%)
Private practice in high income country in low-to-middle income country	6	(5.0%)
Local hospital in low-to-middle income country	1	(0.8%)
Research		
Clinic work + protected academic time	61	(50.8%)
All clinical work	58	(48.3%)
All academic time	1	(0.8%)
Open Prostate Cancer Trials for Accrual		
1-4	46	(38.3%)
5-10	32	(26. 7%)
0	30	(25.0%)
>10	12	(10.0%)

Participant Characteristic (n=120)	**Number(%)[a]**	
Drugs Registered in Clinic		
Docetaxel (CRPC)	115	(96.6%)
Abiraterone (post-chemotherapy)	114	(95.8%)
Cabazitaxel	112	(94.1%)
Enzalutamide (post-chemotherapy)	111	(93.3%)
Abiraterone (pre-chemotherapy)	110	(92.4%)
Enzalutamide (pre-chemotherapy)	110	(92.4%)
Docetaxel (CNPC)	99	(83.2%)
Radium-223	95	(79.8%)
Sipuleucel-T	3	(2.5%)
Drugs Registered and Reimbursed in Clinic		
Docetaxel (CRPC)	112	(95.7%)
Abiraterone (post-chemotherapy)	107	(91.5%)
Enzalutamide (post-chemotherapy)	105	(89.7%)
Cabazitaxel	103	(88.0%)
Abiraterone (pre-chemotherapy)	97	(82.9%)
Enzalutamide (pre-chemotherapy)	95	(81.2%)
Docetaxel (CNPC)	88	(75.2%)
Radium-223	85	(72.7%)
Sipuleucel-T	3	(2.5%)
Imaging Modalities Available in Clinic		
Computed tomography	118	(99.2%)
Conventional MRI (spine, pelvis, other region)	114	(95.8%)
Bone scintigraphy	113	(95.0%)
Whole-body MRI	65	(54.6%)
Choline-PET-CT	62	(52.1%)
PSMA-PET-CT	47	(39.5%)
Fluoride-PET-CT	37	(31.1%)
Fluciclovine-PET-CT	3	(2.5%)

[a]May not total to 100% due to rounding and may not total to 120 due to multiple responses allowed, when applicable

CRPC, castrate-resistant prostate cancer; CNPC, castrate-naïve prostate cancer; MRI, magnetic resonance imaging; PET-CT, positron emission tomography-computed tomography; PSMA, prostate-specific membrane antigen

Supplementary Table 2. Topics Reaching Consensus ≥75% Votes with Panelists and both Pre- and Post-Conference Surveys[a]

Question	Answer	Panelists	Pre-Conference	Post-Conference
		(%)	No. (%)	No. (%)
Do you recommend docetaxel and ADT in de novo mCNPC with high volume disease?[b]	Yes, in the majority of patients	96%	95/120 (79.17%)	104/117 (88.89%)
If you use chemo-hormonal therapy in mCNPC, which chemotherapy regimen do you recommend for the majority of patients?	3-weekly regimen of docetaxel with 75 mg/m^2	96%	91/120 (75.83%)	102/117 (87.18%)
Do you recommend docetaxel and ADT in non-metastatic CNPC (N0M0) with biochemical relapse?	No	90%	103/120 (85.83%)	107/117 (91.45%)
What is your preferred first-line mCRPC treatment in the majority of asymptomatic or minimally symptomatic men who did NOT receive docetaxel in the castrate-naïve setting?	Abiraterone or enzalutamide	86%	98/120 (81.67%)	106/116 (91.38%)
What is your preferred first-line mCRPC treatment in the majority of asymptomatic or minimally symptomatic men who did receive docetaxel in the castrate-naïve setting?	Abiraterone or enzalutamide	90%	105/120 (87.50%)	110/116 (94.83%)
What is your preferred second-line mCRPC treatment in the majority of symptomatic men who had PD as best response to first-line abiraterone or enzalutamide?	Taxane	96%	104/120 (86.67%)	102/116 (87.93%)
What is your preferred second-line mCRPC treatment in the majority of symptomatic men with acquired resistance (initial response followed by PD) after first-line abiraterone or enzalutamide?	Taxane	90%	95/120 (79.17%)	97/116 (83.62%)
What is your preferred second-line mCRPC treatment in the majority of asymptomatic/minimally symptomatic men progressing on or after docetaxel (without prior abiraterone or enzalutamide)?	Abiraterone or enzalutamide	92%	103/120 (85.83%)	102/116 (87.93%)
Do you recommend regular physical exercise in men with PC starting on ADT?	Yes, in the majority of patients	98%	105/115 (91.30%)	108/113 (95.58%)

[a]Based on answers with the majority vote

[b]As defined by CHAARTED (visceral [lung or liver] and/or 4 bone metastases, at least one beyond pelvis and vertebral column; Sweeney CJ, Chen YH, Carducci M, et al. Chemohormonal therapy in metastatic hormone-sensitive prostate cancer. N Engl J Med. 2015;373:737-746)

ADT, androgen deprivation therapy; mCNPC, metastatic castrate-naïve prostate cancer; mCRPC, metastatic castrate-resistant prostate cancer; PD, progressive disease; PC, prostate cancer

Supplementary Table 3. Discordant Answers between Panelists and Participants[a]

Question	Panelists		Participants	Pre-Conference	Post-Conference
	Answer	(%)	Answer	No. (%)	No. (%)
What is your preferred first-line mCRPC treatment in the majority of symptomatic men who did NOT receive docetaxel in the castration-naïve setting?	Abiraterone or enzalutamide	52%	Docetaxel	63/120 (52.50%)	58/116 (50.00%)
What is your preferred first-line mCRPC treatment option in the majority of symptomatic men who received chemo-hormonal therapy and who progressed within ≤6 months of docetaxel in the castration-naïve setting?	Abiraterone or enzalutamide	57%	Cabazitaxel	53/120 (44.17%)	54/116 (46.55%)
If you have to choose between abiraterone and enzalutamide what is your preferred first-line choice for men with mCRPC with no contraindication to either drug?	No preferred choice	37%	Abiraterone	39/120 (32.50%)	41/116 (35.34%)
In men with mCRPC who are on treatment with abiraterone or enzalutamide for bone and soft tissue metastases and who are progressing only in the bone, do you recommend the addition of radium-223?	Yes, in the majority of patients	43%	Yes, in the minority of selected patients	45/120 (37.50%)	51/116 (43.97%)
What imaging test is most suitable to "exclude" distant metastases in high-risk and locally-advanced prostate cancer?	CT and bone scintigraphy	41%	PET/CT (PSMA, choline, or fluciclovine)	69/118 (58.47%)	84/116 (72.41%)
If you recommend radical local treatment plus ADT in men with newly diagnosed oligometastatic prostate cancer and an untreated primary do you recommend adding docetaxel?	Yes, in a minority of selected patients	39%	No	45/115 (39.13%)	40/113 (35.40%)
Do you recommend a baseline measurement of vitamin D in men with prostate cancer starting on ADT?	Yes, in the majority of patients	43%	No	54/115 (46.96%)	46/113 (40.71%)
Do you recommend a baseline measurement of bone mineral density in men with prostate cancer starting on ADT?	Yes, in the majority of patients	62%	No	55/115 (47.83%)	43/113 (38.05%)

Question	Panelists		Participants	Pre-Conference	Post-Conference
	Answer	**(%)**	**Answer**	**No. (%)**	**No. (%)**
Do you recommend to routinely involve a multidisciplinary team for prevention or management of ADT-related adverse effects?	Yes, in the majority of patients	42%	Yes, in a minority of selected patients	29/115 (25.22%)	51/113 (45.13%)
Do you recommend a health status assessment in men with advanced prostate cancer ≥70 years before treatment decision?	Yes, in a minority of selected patients	42%	Yes, in the majority of patients	46/115 (40.00%)	48/113 (42.48%)
If you recommend a health status assessment in men with advanced prostate cancer ≥70 years which one do you recommend?	Screening by G8 only (followed by further assessment if score ≤14)	30%	Comprehensive Geriatric Assessment	23/115 (20.00%)	24/113 (21.24%)

[a]Based on answers with the majority vote
mCRPC, metastatic castrate-resistant prostate cancer; CT, computed tomography; PET-CT, positron emission tomography-computed tomography; PSMA, prostate-specific membrane antigen; ADT, androgen deprivation therapy

Supplementary Table 4. Pre-selected 57 Questions and Pre- and Post-conference Survey Responses

Question	Answer[a]	Panelists[b]	Pre-conference	Post-conference
For the purpose of treatment selection, what is the most meaningful definition of high-volume disease in castration-naïve metastatic prostate cancer?	As defined by CHAARTED[c] (visceral [lung or liver] and/or 4 bone metastases, at least one beyond pelvis and vertebral column)	74%	68/120 (56.67%)	73/120 (60.83%)
What kind of hormone therapy do you recommend in the majority of men presenting with high-volume metastatic castration-naïve prostate cancer?	Continuous ADT using a LHRH agonist (plus a short course of first-generation AR antagonist to prevent testosterone surge)	68%	73/120 (60.83%)	79/120 (65.83%)
Do you recommend docetaxel in addition to ADT in men with de novo metastatic castration-naïve prostate cancer and high volume disease as defined by CHAARTED (visceral metastases and/or ≥4 bone lesions with ≥1 beyond vertebral bodies and pelvis)?	Yes, in the majority of patients	96%	95/120 (79.17%)	104/117 (88.89%)
Do you recommend docetaxel in addition to ADT in men with de novo metastatic castration-naïve and low-volume disease as per CHAARTED (no visceral metastases and <4 bone lesions and only confined to axial skeleton)?	Yes, in a minority of selected patients	65%	54/120 (45.00%)	67/117 (57.26%)
Do you recommend docetaxel in addition to ADT in with metastatic castration-naïve disease relapsing after prior treatment for localized prostate cancer and with high volume disease as per CHAARTED (visceral metastases and/or ≥4 bone lesions with ≥1 beyond vertebral bodies and pelvis)?	Yes, in the majority of patients	74%	82/120 (68.33%)	84/117 (71.79%)
Do you recommend docetaxel in addition to ADT in with metastatic castration-naïve disease relapsing after prior treatment for localized prostate cancer with low volume bone metastases as per CHAARTED criteria (no visceral metastases and <4 bone lesions)?	Yes, in a minority of selected patients	54%	47/120 (39.17%)	63/117 (53.85%)

Question	Answer[a]	Panelists[b]	Pre-conference	Post-conference
If you use chemo-hormonal therapy in men with metastatic castration-naïve disease which chemotherapy regimen do you recommend for the majority of patients?	3-weekly regimen of docetaxel with 75 mg/m^2	96%	91/120 (75.83%)	102/117 (87.18%)
Do you recommend docetaxel in addition to ADT in men with castration-naïve (N1M0) prostate cancer?	No	71%	78/120 (65.00%)	77/117 (65.81%)
Do you recommend docetaxel in addition to ADT in men with non-metastatic castration-naïve (N0M0) prostate cancer with biochemical relapse?	No	90%	103/120 (85.83%)	107/117 (91.45%)
What is your preferred first-line mCRPC treatment option in the majority of asymptomatic or minimally symptomatic men who did NOT receive docetaxel in the castration-naïve setting?	Abiraterone or enzalutamide	86%	98/120 (81.67%)	106/116 (91.38%)
What is your preferred first-line mCRPC treatment option in the majority of symptomatic men who did NOT receive docetaxel in the castration-naïve setting?	Abiraterone or enzalutamide (Panelists) Docetaxel (Participants)	52%	63/120 (52.50%)	58/116 (50.00%)
What is your preferred first-line mCRPC treatment option in the majority of asymptomatic or minimally symptomatic men who did receive docetaxel in the castration-naïve setting?	Abiraterone or enzalutamide	90%	105/120 (87.50%)	110/116 (94.83%)
What is your preferred first-line mCRPC treatment option in the majority of symptomatic men who did receive docetaxel in the castration-naïve setting?	Abiraterone or enzalutamide	73%	60/120 (50.00%)	72/116 (62.07%)
What is your preferred first-line mCRPC treatment option in the majority of asymptomatic or minimally symptomatic men who received chemo-hormonal therapy and who progressed within ≤6 months of docetaxel in the castration-naïve setting?	Abiraterone or enzalutamide	77%	72/120 (60.00%)	88/116 (75.86%)

Question	Answer[a]	Panelists[b]	Pre-conference	Post-conference
What is your preferred first-line mCRPC treatment option in the majority of symptomatic men who received chemo-hormonal therapy and who progressed within ≤6 months of docetaxel in the castration-naïve setting?	Abiraterone or enzalutamide (Panelists) Cabazitaxel (Participants)	57%	53/120 (44.17%)	54/116 (46.55%)
If you have to choose between abiraterone and enzalutamide, what is your preferred first-line choice for men with mCRPC with no contraindication to either drug?	No preferred choice (Panelists) Abiraterone (Participants)	37%	39/120 (32.50%)	41/116 (35.34%)
When you use cabazitaxel for men with mCRPC at any point in the treatment sequence, which dose do you recommend in the majority of men?	Cabazitaxel 20 mg/m^2, with dose reductions in subsequent cycles as indicated	59%	29/120 (24.17%)	38/116 (32.76%)
In men with mCRPC who are on treatment with abiraterone or enzalutamide for bone and soft tissue metastases and who are progressing only in the bone, do you recommend the addition of radium-223?	Yes, in the majority of patients (Panelists) Yes, in the minority of selected patients (Participants)	43%	45/120 (37.50%)	51/116 (43.97%)
In men with mCRPC who are on treatment with radium-223 and progressing outside of the bone do you recommend completing treatment with radium-223 plus adding abiraterone or enzalutamide (if they have not received either drug before)?	Yes, in the majority of patients	52%	40/120 (33.33%)	49/116 (42.24%)
What is your preferred second-line mCRPC treatment option in the majority of men with asymptomatic mCRPC who had progressive disease as best response to first-line abiraterone or enzalutamide?	Taxane	70%	72/120 (60.00%)	82/116 (70.69%)
What is your preferred second-line mCRPC treatment option in the majority of men with symptomatic mCRPC who had progressive disease as best response to first-line abiraterone or enzalutamide?	Taxane	96%	104/120 (86.67%)	102/116 (87.93%)

Question	Answer[a]	Panelists[b]	Pre-conference	Post-conference
What is your preferred second-line mCRPC treatment option in the majority of men with asymptomatic mCRPC and acquired resistance (initial response followed by progression) after first-line abiraterone or enzalutamide?	Taxane	57%	71/120 (59.17%)	81/116 (69.83%)
What is your preferred second-line mCRPC treatment option in the majority of men with symptomatic mCRPC and acquired resistance (initial response followed by progression) after use of first-line abiraterone or enzalutamide?	Taxane	90%	95/120 (79.17%)	97/116 (83.62%)
What is your preferred second-line mCRPC treatment option in the majority of asymptomatic/minimally symptomatic men, progressing on or after docetaxel for mCRPC (without prior abiraterone or enzalutamide)?	Abiraterone or enzalutamide	92%	103/120 (85.83%)	102/116 (87.93%)
What is your preferred second-line mCRPC treatment option in the majority of symptomatic men with mCRPC, progressing on or after docetaxel for mCRPC (without prior abiraterone or enzalutamide)?	Abiraterone or enzalutamide	76%	58/120 (48.33%)	62/116 (53.45%)
In men with mCRPC who have exhausted approved treatments and there is no clinical trial available, do you recommend using carboplatin-based chemotherapy?	If DNA repair defect present and/or neuroendocrine differentiation or clinical evidence suggestive of neuroendocrine differentiation	47%	33/120 (27.50%)	49/116 (42.24%)
Which osteoclast-targeted therapy do you recommend for men with mCRPC and bone metastases for SRE/SSE prevention?	Denosumab	54%	54/120 (45.00%)	57/116 (49.14%)
When you use osteoclast-targeted therapy (zoledronic acid or denosumab) in men with mCRPC and bone metastases, what treatment duration do you recommend?	Approximately 2 years	68%	64/120 (53.33%)	87/116 (75.00%)

Question	Answer[a]	Panelists[b]	Pre-conference	Post-conference
What monitoring by imaging do you recommend for the majority of men with metastatic castration-sensitive/naïve prostate cancer?	Baseline imaging and follow-up imaging at PSA nadir/completion of 6 cycles of docetaxel as part of chemo-hormonal therapy and again at progression (confirmed PSA rise and/or clinical progression)	51%	52/118 (44.07%)	56/116 (48.28%)
What kind of imaging do you recommend for the majority of men with metastatic castration-naïve prostate cancer?	CT and bone scintigraphy	73%	97/118 (82.20%)	84/116 (72.41%)
What monitoring by imaging do you recommend for the majority of men on first-line mCRPC therapy?	Baseline imaging and regular monitoring by imaging every 3-6 months	54%	45/118 (38.14%)	51/116 (43.97%)
What kind of imaging do you recommend for the majority of men with mCRPC on first-line therapy?	CT and bone scintigraphy	74%	94/118 (79.66%)	82/116 (70.69%)
Do you recommend genetic counseling and testing for men with newly diagnosed metastatic (M1) prostate cancer?	Yes, in a minority of selected patients	62%	58/118 (49.15%)	76/116 (65.52%)
What imaging test is most suitable to "exclude" distant metastases in high-risk and locally-advanced prostate cancer?	CT and bone scintigraphy (Panelists) PET/CT (PSMA, choline, or fluciclovine) (Participants)	41%	69/118 (58.47%)	84/116 (72.41%)
Would you add adjuvant RT in high-risk localized PC patients with seminal vesicle involvement alone?	Yes, in the majority of patients	38%	36/117 (30.77%)	43/116 (37.07%)
Would you add adjuvant RT in high-risk localized PC patients with positive surgical margins alone?	Yes, in the majority of patients	48%	54/117 (46.15%)	47/116 (40.52%)
Would you add adjuvant RT in high-risk localized PC patients with Gleason 8-10 or Gleason Grade Group 4 or 5?	No	55%	39/117 (33.33%)	45/116 (38.79%)
If you recommend adding ADT to adjuvant radiation therapy what type of ADT do you recommend in the majority of men?	LHRH agonist/antagonist	61%	80/117 (68.38%)	82/116 (70.69%)

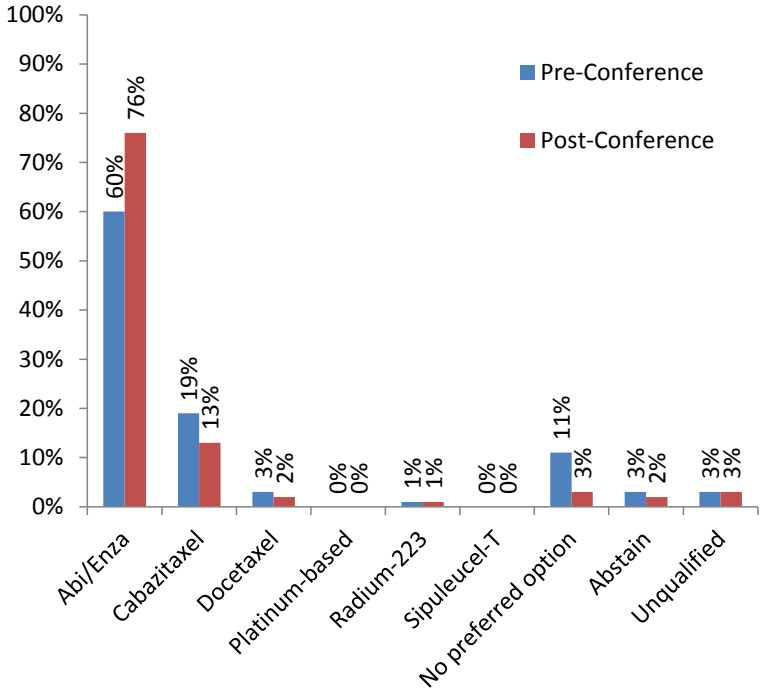
Question	Answer[a]	Panelists[b]	Pre-conference	Post-conference
Do you recommend adjuvant radiation therapy in men with pN1 disease (adequate sampling) and no local adverse factors (no pT3b, no R1) and undetectable postoperative PSA and who have recovered urinary continence?	No	43%	44/117 (37.61%)	33/116 (28.45%)
At what confirmed PSA level do you recommend starting salvage radiation therapy in the majority of men with isolated rising PSA alone after prostatectomy?	0.2 ng/mL	44%	61/117 (52.14%)	82/116 (70.69%)
Do you recommend adding ADT in combination with salvage radiation therapy?	Yes, in the majority of patients	61%	34/117 (29.06%)	57/116 (49.14%)
In men with non-metastatic disease and confirmed rising PSA (post-local therapy +/- salvage local RT), do you recommend starting ADT?	In a minority of selected patients e.g. PSA ≥4ng/ml and rising with doubling time less than 6 months OR PSA ≥20 ng/ml (STAMPEDE[d] inclusion criteria)	65%	74/117 (63.25%)	83/116 (71.55%)
A clinically meaningful definition of oligometastatic prostate cancer that influences treatment decision (local treatment of all lesions +/- systemic therapy) includes:	Only patients with a limited number of bone and/or lymph nodes metastases that can be treated with local therapy	61%	74/115 (64.35%)	83/113 (73.45%)
What is your cut-off for the number of metastases to consider a patient as oligometastatic?	≤3 metastases	66%	56/115 (48.70%)	80/113 (70.80%)
In men with potentially de novo oligometastatic disease what imaging do you recommend to confirm this diagnosis (apart from local staging)?	PET-CT (PSMA, choline, or fluciclovine)	34%	62/115 (53.91%)	49/113 (43.36%)
Which treatment do you recommend in men with newly-diagnosed oligometastatic prostate cancer with an untreated primary?	Local treatment (surgery or RT) + ADT 24-36m +/- docetaxel	31%	38/115 (33.04%)	38/113 (33.63%)
If you recommend radical local treatment plus ADT in men with newly diagnosed oligometastatic prostate cancer and an untreated primary do you recommend adding docetaxel?	Yes, in a minority of selected patients (Panelists) No (Participants)	39%	45/115 (39.13%)	40/113 (35.40%)

Question	Answer[a]	Panelists[b]	Pre-conference	Post-conference
In men with newly-diagnosed oligometastatic prostate cancer and an untreated primary what do you recommend for treatment of the primary?	Radiation therapy	45%	41/115 (35.65%)	49/113 (43.36%)
What do you advise patients about the relationship between ADT and risk of bone loss and/or fractures?	There is strong evidence that ADT increases risk of bone loss and/or fractures	87%	66/115 (57.39%)	75/113 (66.37%)
Do you recommend a baseline measurement of vitamin D in men with prostate cancer starting on ADT?	Yes, in the majority of patients (Panelists) No (Participants)	43%	54/115 (46.96%)	46/113 (40.71%)
Do you recommend routine supplementation of calcium and vitamin D in the majority of men with prostate cancer starting on ADT?	Yes both	73%	72/115 (62.61%)	81/113 (71.68%)
Do you recommend a baseline measurement of bone mineral density in men with prostate cancer starting on ADT?	Yes, in the majority of patients (Panelists) No (Participants)	62%	55/115 (47.83%)	43/113 (38.05%)
Do you recommend drug therapy to prevent bone loss and/or fractures with denosumab or a bisphosphonate for osteoporosis prophylaxis in men with prostate cancer starting on ADT?	Only in patients with documented osteopenia or osteoporosis	70%	49/115 (42.61%)	67/113 (59.29%)
Do you recommend regular physical exercise in men with prostate cancer starting on ADT?	Yes, in the majority of patients	98%	105/115 (91.30%)	108/113 (95.58%)
Do you recommend to routinely involve a multidisciplinary team for prevention or management of ADT-related adverse effects?	Yes, in the majority of patients (Panelists) Yes, in a minority of selected patients (Participants)	42%	29/115 (25.22%)	51/113 (45.13%)
Do you recommend a health status assessment in men with advanced prostate cancer ≥70 years before treatment decision?	Yes, in a minority of selected patients (Panelists) Yes, in the majority of patients (Participants)	42%	46/115 (40.00%)	48/113 (42.48%)
If you recommend a health status assessment in men with advanced prostate cancer ≥70 years which one do you recommend?	Screening by G8 only (followed by further assessment if score ≤14) (Panelists) Comprehensive Geriatric Assessment (Participants)	30%	23/115 (20.00%)	24/113 (21.24%)

[a]Based on answers with the majority vote
[b]Based on APCCC 2017 [1]
[c]Based on CHAARTED trial (Sweeney CJ, Chen YH, Carducci M, et al. Chemohormonal therapy in metastatic hormone-sensitive prostate cancer. N Engl J Med. 2015;373:737-746)
[d]Based on STAMPEDE trial (James ND, Sydes MR, Clarke NW, et al. Addition of docetaxel, zoledronic acid, or both to first-line long-term hormone therapy in prostate cancer (STAMPEDE): survival results from an adaptive, multiarm, multistage, platform randomised controlled trial. Lancet. 2016;387:1163-1177)

ADT, androgen deprivation therapy; LHRH, luteinizing hormone-releasing hormone; AR, androgen receptor; mCRPC, metastatic castrate-resistant prostate cancer; SRE, skeletal-related events; SSE, symptomatic skeletal events; PSA, prostate-specific antigen; CT, computed tomography; PET-CT, positron emission tomography-computed tomography; PSMA, prostate-specific membrane antigen; RT, radiation therapy; PC, prostate cancer

What is your preferred first-line mCRPC treatment option in the majority of asymptomatic or minimally symptomatic men who received chemo-hormonal therapy and progressed ≤6 months after docetaxel in the castration-naïve setting?



When you use osteoclast-targeted therapy (zoledronic acid or denosumab) in men with mCRPC and bone metastases, what treatment duration do you recommend?

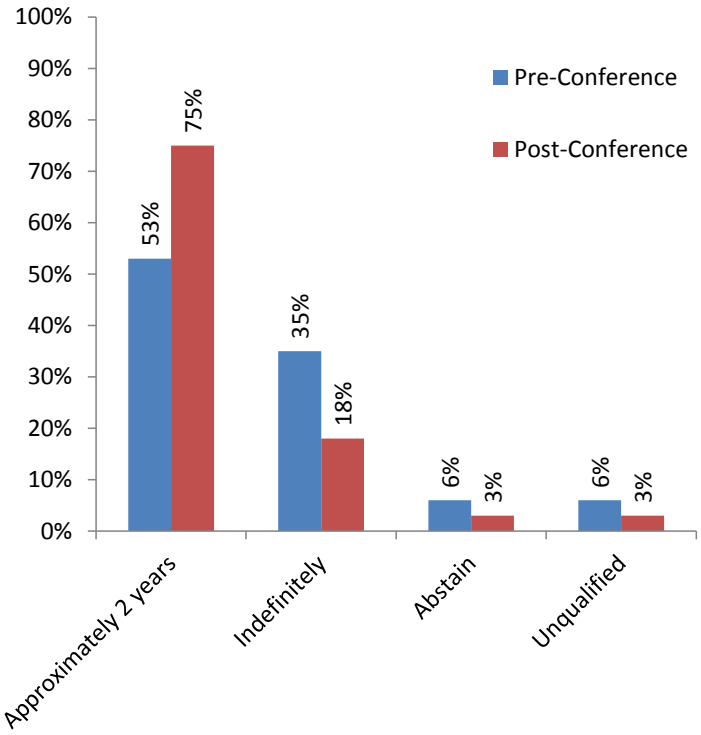


Figure 1. Topics Reaching Consensus ≥75% Votes on Post- but NOT Pre-Conference Surveys

mCRPC, metastatic castrate-resistant prostate cancer

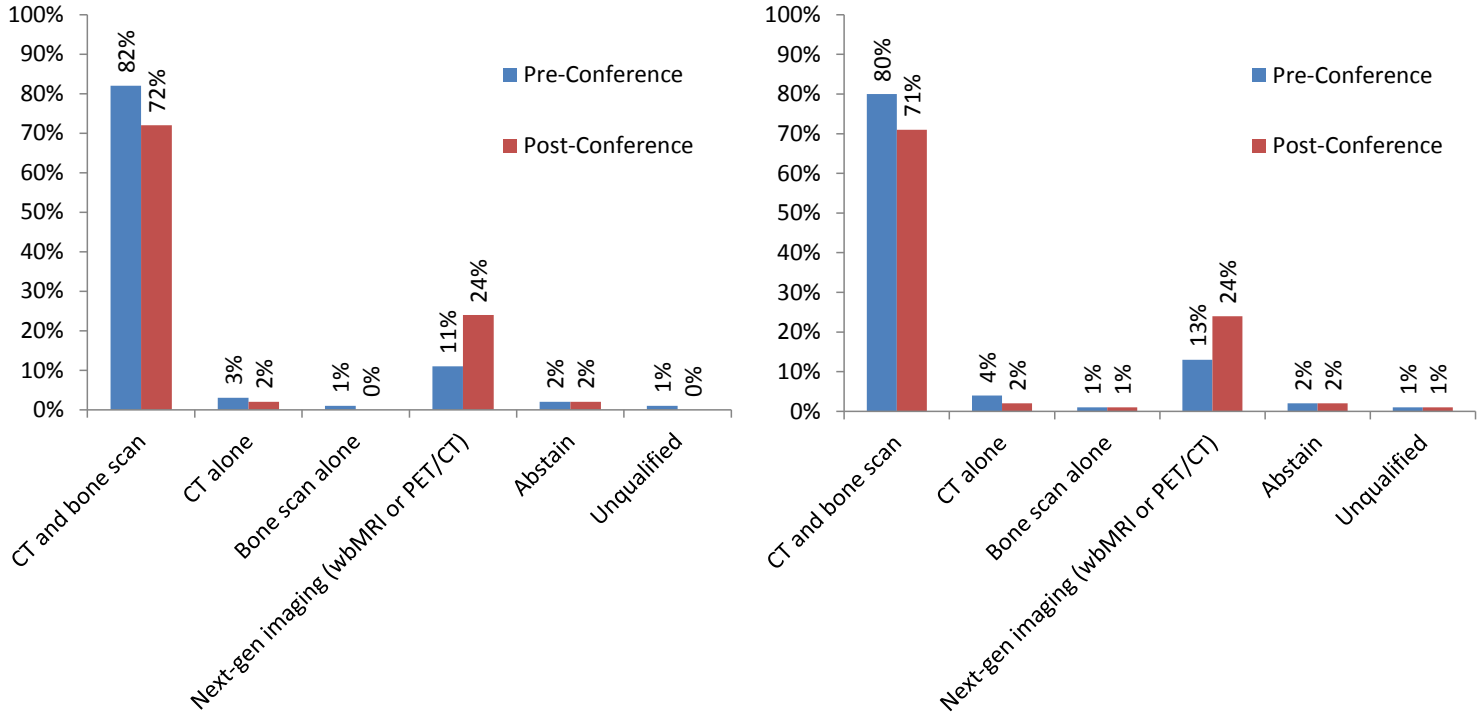


Figure 2. Topics Reaching Consensus ≥75% Votes on Pre- but NOT Post-Conference Surveys

mCNPC, metastatic castrate-naïve prostate cancer; mCRPC, metastatic castrate-resistant prostate cancer; CT, computed tomography; wbMRI, whole-body magnetic resonance imaging; PET/CT, positron emission tomography-computed tomography