

#### **Apalutamide**

Resolution of: 1 August 2019 Valid until: 15 May 2020

Entry into force on: 1 August 2019

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# Therapeutic indication (according to the marketing authorisation of 14 January 2019):

Erleada is indicated in adult men for the treatment of non-metastatic castration-resistant prostate cancer (NM-CRPC) who are at high risk of developing metastatic disease.

1. Additional benefit of the medicinal product in relation to the appropriate comparator therapy

Adult men with non-metastatic castration-resistant prostate carcinoma (nm-CRPC) who are at high risk of developing metastases:

# **Appropriate comparator therapy:**

A monitoring wait-and-see approach while maintaining the existing conventional androgen deprivation therapy (ADT).

The extent and probability of the additional benefit of apalutamide over the monitoring wait-and-see approach while maintaining the existing conventional androgen deprivation therapy (ADT):

Hint for a minor additional benefit.

# Study results according to endpoints:1

Adult men with non-metastatic castration-resistant prostate carcinoma (nm-CRPC) who are at high risk of developing metastases:

SPARTAN study: Apalutamide + ADT vs placebo + ADT

# Mortality

Endpoint	Apalutamide + ADT		Р	lacebo + ADT	Intervention vs. control
	N	Median survival time in months [95% CI] Patients with event n (%)	N	Median survival time in months [95% CI] Patients with event n (%)	Hazard ratio (HR) [95% CI] p value Absolute difference (AD)a
Overall survival					
	806	n.a. 62 (7.7)	401	39.03 [39.03; n.c.] 42 (10.5)	0.70 [0.47; 1.04] 0.076

# Morbidity

Endpoint	Ара	alutamide + ADT	Placebo + ADT		Intervention vs. control		
	N	Median in months [95% CI] Patients with event n (%)	N	Median in months [95% CI] Patients with event n (%)	HR [95% CI] p value Absolute difference (AD) <sup>a</sup>		
Metastasis-free survival (	Metastasis-free survival (MFS) <sup>2</sup>						
	806	40.51 [29.70; 40.51] 209 (25.9)	401	15.70 [14.55; 18.40] 210 (52.4)	0.30 [0.24; 0.36] < 0.0001 AD=24.81 months		
Time before initiation of	on of cytotoxic chemotherapy <sup>2</sup>						
	806	n.a. [n.a.; n.a.] 46 (5.7)	401	n.a. [n.a.; n.a.] 44 (11.0)	0.44 [0.29; 0.66] < 0.0001		
Symptomatic progressio	n						
	806	n.a. 64 (7.9)	401	n.a. [36.83; n.c.] 63 (15.7)	0.45 [0.32; 0.63] < 0.001		

<sup>&</sup>lt;sup>1</sup> Data from the dossier evaluation of the IQWiG (A19-09) and from the addendum (A19-51), unless otherwise indicated.

<sup>&</sup>lt;sup>2</sup> Dossier apalutamide Module 4A of 21 January 2019

Endpoint	Ара	alutamide + ADT	P	lacebo + ADT	Intervention vs. control
	N	Median in months [95% CI] Patients with event n (%)	N	Median in months [95% CI] Patients with event n (%)	HR [95% CI] p value Absolute difference (AD)a
Endpoint component: skeletal events <sup>b</sup>	806	n.a. 25 (3.1)	401	n.a. 18 (4.5)	0.62 [0.34; 1.14] 0.127
Endpoint component Pain progression or deterioration of disease- related symptoms <sup>c</sup>	806	n.a. 35 (4.3)	401	n.a. [36.83; n.c.] 28 (7.0)	0.56 [0.34; 0.92] 0.022
Endpoint component Clinically significant symptoms because of locoregional tumour progression <sup>d</sup>	806	n.a. 18 (2.2)	401	n.a. 24 (6.0)	0.34 [0.18; 0.62] < 0.001
Health status (EQ-5D VA	S)				
MID 7 <sup>e</sup>	806	10.02 [7.43; 14.85] 432 (53.6)	401	11.30 [6.47; 18.50] 198 (49.4)	0.96 [0.81; 1.14] 0.618
MID 10 <sup>f</sup>	806	14.69 [9.96; 23.95] 408 (50.6)	401	14.85 [9.27; 18.60] 188 (46.9)	0.93 [0.78; 1.11] 0.428

Endpoint	Apa	Apalutamide + ADT		Placebo + ADT	Intervention vs. control		
	N	Values at start of study MV (SD)	N	Values at start of study MV (SD)	Mean difference [95% CI]		
		Change to Cycle 13 MV (SE)		Change to Cycle 13 MV (SE)	p value Hedges´g		
Health status (EC	Q-5D VAS) (presented as a supplement)						
	no data avail able	76.17 (17.31) 0.44 (0.55)	no data avail able	76.81 (16.88) -0.60 (0.88)	1.04 [no data available] 0.315		

# Health-related quality of life

Endpoint	Ара	alutamide + ADT	PI	lacebo + ADT	Intervention vs. control		
	N	Median in months [95% CI] Patients with event n (%)	N	Median in months [95% CI] Patients with event n (%)	HR [95% CI] p value Absolute difference (AD)a		
FACT-P total score <sup>f</sup>							
	806	6.60 [5.55; 7.92] 498 (61.8)	401	8.38 [6.47; 12.91] 222 (55.4)	1.06 [0.90; 1.25] 0.465		
FACT-P sub-scales (pres	FACT-P sub-scales (presented additionally) <sup>9</sup>						
Prostate cancer subscale (PCS)	806	3.84 [3.71; 4.70] 575 (71.3)	401	3.78 [2.86; 4.80] 266 (66.3)	0.98 [0.84; 1.14]		
Physical well-being (PWB)	806	6.57 [5.55; 8.38] 488 (60.5)	401	7.43 [5.59; 11.10] 222 (55.4)	1.02 [0.87; 1.20]		
Familiar/social well-being (SWB)	806	7.46 [5.59; 11.07] 437 (54.2)	401	4.90 [3.84; 8.38] 218 (54.4)	0.88 [0.75; 1.04]		
Emotional well-being (EWB)	806	12.98 [10.87; 18.43] 411 (51.0)	401	14.75 [10.61; n.c.] 176 (43.9)	1.08 [0.90; 1.29]		
Functional well-being (FWB)	806	4.63 [3.78; 5.59] 522 (64.8)	401	6.51 [4.70; 9.26] 224 (55.9)	1.17 [1.00; 1.37]		

# Side effects

Endpoint	Apalutamide + ADT		Placebo + ADT		Intervention vs. control
	Z	Median in months [95% CI] Patients with event n (%)	Z	Median in months [95% CI] Patients with event n (%)	HR [95% CI] p value Absolute difference (AD) <sup>a</sup>
Adverse events (presente	d add	itionally)			
	803	0.56 [0.46; 0.72] 775 (96.5)	398	0.76 [0.53; 0.92] 371 (93.2)	-
Serious adverse events (\$	SAE)				
	803	n.a. 204 (25.4)	398	35.25 [25.96; n.c.] 93 (23.4)	0.80 [0.62; 1.03] 0.081

Endpoint	Apalutamide + ADT		PI	acebo + ADT	Intervention vs. control
	N	Median in months [95% CI]	N	Median in months [95% CI]	HR [95% CI] p value
		Patients with event n (%)		Patients with event n (%)	Absolute difference (AD) <sup>a</sup>
Severe adverse events (C	TCAE	grade ≥ 3)			
	803	22.44 [17.68; 26.18] 366 (45.6)	398	24.15 [18.53; 30.00] 137 (34.4)	1.13 [0.92; 1.37] 0.246
Therapy discontinuation	becau	se of adverse ever	nts		
	803	n.a. 85 (10.6)	398	36.83 [36.83; n.c.] 28 (7.0)	1.33 [0.87; 2.04] 0.193
Specific adverse eventsh		(10.0)		20 (110)	0.100
Arthralgia (PT, AE)	803	n.a.	398	n.a.	1.80 [1.21; 2.69]
		126 (15.7) <sup>i</sup>		30 (7.5)	0.004
Skin and subcutaneous tissue disorders (SOC, severe AE)	803	n.a. 50 (6.2)	398	n.a. 1 (0.3)	23.48 [3.24; 170.03] 0.002
Nervous system disorders (SOC AE)	803	n.a. 288 (35.9)	398	n.a. [26.28; n.c.] 90 (22.6)	1.53 [1.21; 1.94] < 0.001
Renal and urinary disorders (SOC, severe AE)	803	n.a. 38 (4.7)	398	n.a. 39 (9.8)	0.37 [0.23; 0.58] < 0.001
Hypothyroidism (PT, AE)	803	n.a. 49 (6.1)	398	n.a. 5 (1.3)	4.09 [1.63; 10.30] 0.003
General disorders and administration site conditions (SOC, severe AE)	803	n.a. 18 (2.2)	398	n.a. 1 (0.3)	7.79 [1.04; 58.49] 0.046
Injury, poisoning, and procedural complications (SOC, SAE)	803	n.a. 41 (5.1)	398	n.a. 5 (1.3)	3.05 [1.20; 7.75] 0.019

<sup>&</sup>lt;sup>a</sup> Absolute difference (AD) given only in the case of a statistically significant difference; own calculation

<sup>&</sup>lt;sup>b</sup> Pathological fractures, compression of the spinal cord, or need for surgical intervention or radiotherapy of the bone

<sup>&</sup>lt;sup>c</sup> With need to initiate a new systemic cancer therapy

d With need of surgical intervention or radiotherapy

<sup>&</sup>lt;sup>e</sup> Time to deterioration by ≥ 7 points

<sup>&</sup>lt;sup>f</sup> Time to deterioration by ≥ 10 points

Endpoint	Apalutamide + ADT		Placebo + ADT		Intervention vs. control
	N	Median in months [95% CI] Patients with event n (%)	N	Median in months [95% CI] Patients with event n (%)	HR [95% CI] p value Absolute difference (AD)a

<sup>&</sup>lt;sup>g</sup> Time to deterioration by ≥ 3 points

Events based on frequency and differences between treatment arms and taking into account patient relevance.

#### Abbreviations used:

AD = absolute difference; CTCAE = Common Terminology Criteria for Adverse Events; HR = hazard ratio; CI = confidence interval; MID = minimal important difference; MD = mean difference; N = number of patients evaluated; n = number of patients with (at least one) event; n.c. = not calculable; n.a. = not achieved; SD = standard deviation; vs = versus; VAS = visual analogue scale

# 2. Number of patients or demarcation of patient groups eligible for treatment

Adult men with non-metastatic castration-resistant prostate carcinoma (nm-CRPC) who are at high risk of developing metastases:

approx. 810-1180 patients

# 3. Requirements for a quality-assured application

The requirements in the product information are to be taken into account. The European Medicines Agency (EMA) provides the contents of the product information (summary of product characteristics, SmPC) for Erleada® (active ingredient: apalutamide) at the following publicly accessible link (last access: 10 May 2019):

https://www.ema.europa.eu/documents/product-information/erleada-epar-product-information de.pdf

Only specialists in internal medicine, haematology and oncology with experience treating patients with prostate cancer, and specialists in urology and other doctors from other specialisms participating in the oncology agreement may initiate and monitor treatment with apalutamide.

Patients who have not undergone surgical castration should continue receiving chemical castration with GnRH agonists or antagonists during treatment.

<sup>&</sup>lt;sup>i</sup> Selection in accordance with IQWiG methodology; selection based on those identified in the study

<sup>&</sup>lt;sup>i</sup> According to the study report, 128 (15.9%) of the patients in the apalutamide arm had at least one event.

# 4. Treatment costs

# **Annual treatment costs:**

Adult men with non-metastatic castration-resistant prostate carcinoma (nm-CRPC) who are at high risk of developing metastases:

Designation of the therapy	Annual treatment costs/patient			
Medicinal product to be assessed:				
Apalutamide	€50,952.18			
GnRH agonist/GnRH antagonist	€1,283.50-2,124.88			
Total:	€ 52,235.68-53,077.06			
Appropriate comparator therapy:				
GnRH agonist/GnRH antagonist	€1,283.50-2,124.88			

Costs after deduction of statutory rebates (LAUER-TAXE®) as last revised: 15 July 2019)

Costs for additionally required SHI services: not applicable