

FACULTE DE MEDECINE

Département de médecine
Chirurgie Urologique

Le cancer de la prostate



CHOUAKRIA Atef

Maitre de conférence Chirurgie Urologique

Service d'urologie CHU Annaba

Faculté de Médecine Annaba



Service d'urologie CHU Annaba (officiel)



#urologie_annaba

Objectifs

- Connaître les éléments du **diagnostic**.
- Connaître la classification et le **bilan d'extension**.
- Connaître les traitements possibles pour le cancer de la prostate.

Epidémiologie

- Cancer N°1 chez l'homme > 50 ans.
- N°2 en terme de mortalité / cancer.

Cancer Statistics, 2016

Rebecca L. Siegel, MPH¹; Kimberly D. Miller, MPH²; Ahmedin Jemal, DVM, PhD³

Each year, the American Cancer Society estimates the numbers of new cancer cases and deaths that will occur in the United States in the current year and compiles the most recent data on cancer incidence, mortality, and survival. Incidence data were collected by the National Cancer Institute (Surveillance, Epidemiology, and End Results [SEER] Program), the Centers for Disease Control and Prevention (National Program of Cancer Registries), and the North American Association of Central Cancer Registries. Mortality data were collected by the National Center for Health Statistics. In 2016, 1,685,210 new cancer cases and 595,690 cancer deaths are projected to occur in the United States. Overall cancer incidence trends (13 oldest SEER registries) are stable in women, but declining by 3.1% per year in men (from 2009-2012), much of which is because of recent rapid declines in prostate cancer diagnoses. The cancer death rate has dropped by 23% since 1991, translating to more than 1.7 million deaths averted through 2012. Despite this progress, death rates are increasing for cancers of the liver, pancreas, and uterine corpus, and cancer is now the leading cause of death in 21 states, primarily due to exceptionally large reductions in death from heart disease. Among children and adolescents (aged birth-19 years), brain cancer has surpassed leukemia as the leading cause of cancer death because of the dramatic therapeutic advances against leukemia. Accelerating progress against cancer requires both increased national investment in cancer research and the application of existing cancer control knowledge across all segments of the population. CA Cancer J Clin 2016;66:7-30. © 2016 American Cancer Society.

Keywords: cancer cases, cancer statistics, death rates, incidence, mortality, survival, trends

			Males
Prostate	180,890	21%	
Lung & bronchus	117,920	14%	
Colon & rectum	70,820	8%	
Urinary bladder	58,950	7%	
Melanoma of the skin	46,870	6%	
Non-Hodgkin lymphoma	40,170	5%	
Kidney & renal pelvis	39,650	5%	
Oral cavity & pharynx	34,780	4%	
Leukemia	34,090	4%	
Liver & intrahepatic bile duct	28,410	3%	
All Sites	841,390	100%	

Estimated new cases, USA 2016

			Males
Lung & bronchus	85,920	27%	
Prostate	26,120	8%	
Colon & rectum	26,020	8%	
Pancreas	21,450	7%	
Liver & intrahepatic bile duct	18,280	6%	
Leukemia	14,130	4%	
Esophagus	12,720	4%	
Urinary bladder	11,820	4%	
Non-Hodgkin lymphoma	11,520	4%	
Brain & other nervous system	9,440	3%	
All Sites	314,290	100%	

Estimated deaths, USA 2016

Epidémiologie

- Cancer N°1 chez l'homme > 50 ans.
- N°2 en terme de mortalité / cancer.

Cancer Statistics, 2017

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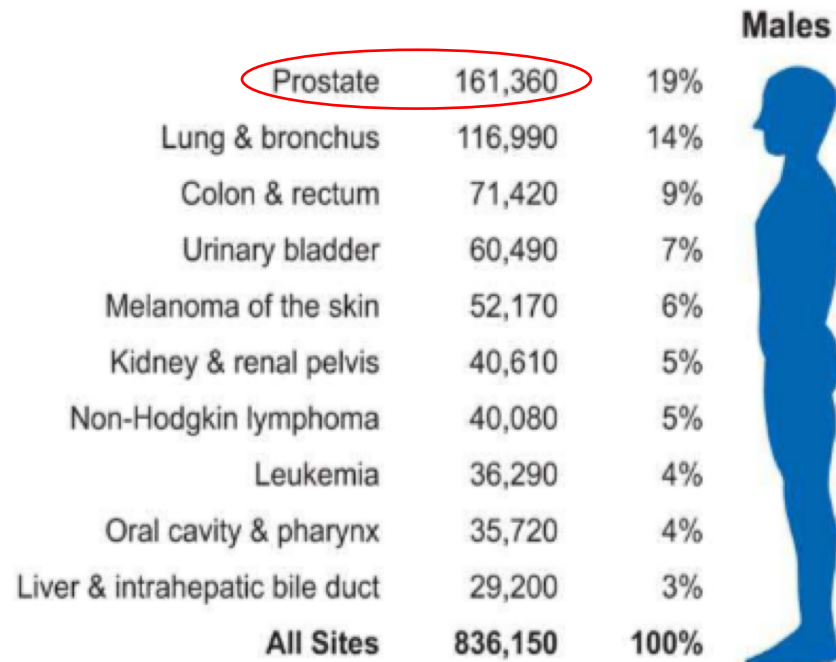
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DISCLOSURES: The authors report no conflicts of interest.

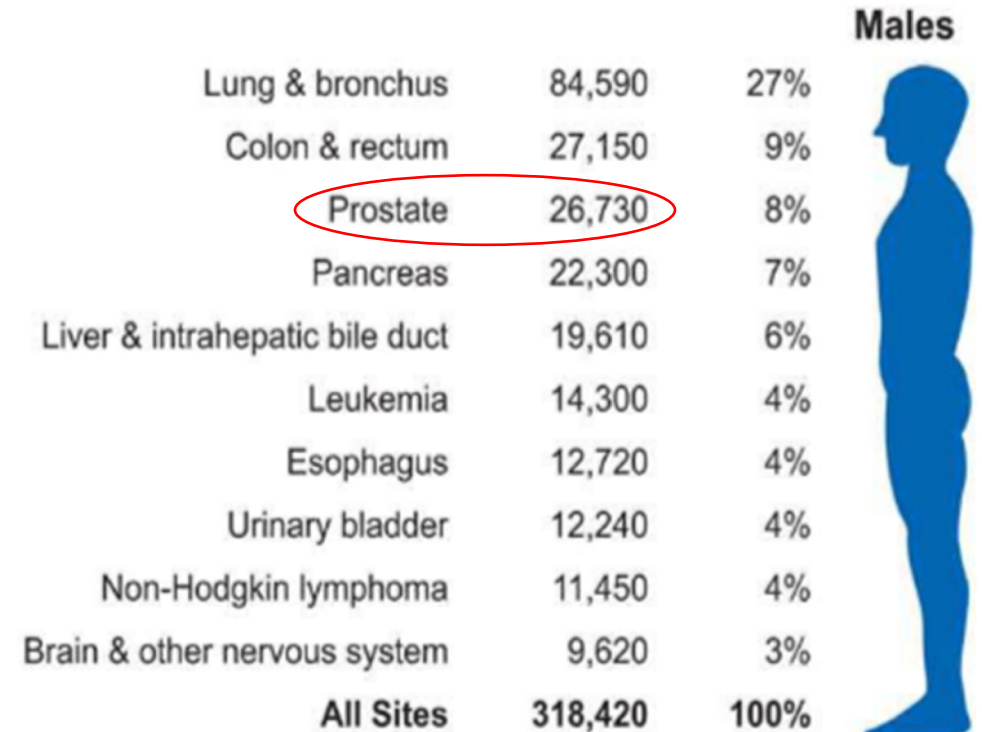
doi: 10.3332/caac.21387. Available online at cancerjournal.org

Abstract: Each year, the American Cancer Society estimates the numbers of new cancer cases and deaths that will occur in the United States in the current year and compiles the most recent data on cancer incidence, mortality, and survival. Incidence data were collected by the Surveillance, Epidemiology, and End Results Program; the National Program of Cancer Registries; and the North American Association of Central Cancer Registries. Mortality data were collected by the National Center for Health Statistics. In 2017, 1,688,780 new cancer cases and 600,920 cancer deaths are projected to occur in the United States. For all sites combined, the cancer incidence rate is 20% higher in men than in women, while the cancer death rate is 40% higher. However, sex disparities vary by cancer type. For example, thyroid cancer incidence rates are 3-fold higher in women than in men (21 vs 7 per 100,000 population), despite equivalent death rates (0.5 per 100,000 population), largely reflecting sex differences in the "epidemic of diagnosis." Over the past decade of available data, the overall cancer incidence rate (2004-2013) was stable in women and declined by approximately 2% annually in men, while the cancer death rate (2005-2014) declined by about 1.5% annually in both men and women. From 1991 to 2014, the overall cancer death rate dropped 25%, translating to approximately 2,143,200 fewer cancer deaths than would have been expected if death rates had remained at their peak. Although the cancer death rate was 15% higher in blacks than in whites in 2014, increasing access to care as a result of the Patient Protection and Affordable Care Act may expedite the narrowing racial gap; from 2010 to 2015, the proportion of blacks who were uninsured halved, from 21% to 11%, as it did for Hispanics (31% to 16%). Gains in coverage for traditionally underserved Americans will facilitate the broader application of existing cancer control knowledge across every segment of the population. CA Cancer J Clin 2017;67:7-30. © 2017 American Cancer Society.

Keywords: cancer cases, cancer statistics, death rates, incidence, mortality



Estimated new cases, USA 2017



Estimated deaths, USA 2017

- Cancer N°1 chez l'homme > 50 ans.
- N°2 en terme de mortalité / cancer.

Cancer Statistics, 2018

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DISCLOSURES: The authors report no conflicts of interest.
doi: 10.3322/caac.21442. Available online at cancerjournal.com

Abstract: Each year, the American Cancer Society estimates the numbers of new cancer cases and deaths that will occur in the United States and compiles the most recent data on cancer incidence, mortality, and survival. Incidence data, available through 2014, were collected by the Surveillance, Epidemiology, and End Results Program; the National Program of Cancer Registries; and the North American Association of Central Cancer Registries. Mortality data, available through 2015, were collected by the National Center for Health Statistics. In 2018, 1,735,350 new cancer cases and 609,640 cancer deaths are projected to occur in the United States. Over the past decade of data, the cancer incidence rate (2005-2014) was stable in women and declined by approximately 2% annually in men, while the cancer death rate (2006-2015) declined by about 1.5% annually in both men and women. The combined cancer death rate dropped continuously from 1991 to 2015 by a total of 26%, translating to approximately 2,378,600 fewer cancer deaths than would have been expected if death rates had remained at their peak. Of the 10 leading causes of death, only cancer declined from 2014 to 2015. In 2015, the cancer death rate was 14% higher in non-Hispanic blacks (NHBs) than non-Hispanic whites (NHWs) overall (death rate ratio [DRR], 1.14; 95% confidence interval [95% CI], 1.13-1.15), but the racial disparity was much larger for individuals aged <65 years (DRR, 1.31; 95% CI, 1.29-1.32) compared with those aged ≥65 years (DRR, 1.07; 95% CI, 1.06-1.09) and varied substantially by state. For example, the cancer death rate was lower in NHBs than NHWs in Massachusetts for all ages and in New York for individuals aged ≥65 years, whereas for those aged <65 years, it was 3 times higher in NHBs in the District of Columbia (DRR, 2.89; 95% CI, 2.16-3.91) and about 50% higher in Wisconsin (DRR, 1.78; 95% CI, 1.56-2.02), Kansas (DRR, 1.51; 95% CI, 1.25-1.81), Louisiana (DRR, 1.49; 95% CI, 1.38-1.60), Illinois (DRR, 1.48; 95% CI, 1.39-1.57), and California (DRR, 1.45; 95% CI, 1.38-1.54). Larger racial inequalities in young and middle-aged adults probably partly reflect less access to high-quality health care. *CA Cancer J Clin* 2018;68:7-30. © 2018 American Cancer Society.

Keywords: cancer cases, cancer statistics, death rates, incidence, mortality

Males			
Prostate	164,690	19%	
Lung & bronchus	121,680	14%	
Colon & rectum	75,610	9%	
Urinary bladder	62,380	7%	
Melanoma of the skin	55,150	6%	
Kidney & renal pelvis	42,680	5%	
Non-Hodgkin lymphoma	41,730	5%	
Oral cavity & pharynx	37,160	4%	
Leukemia	35,030	4%	
Liver & intrahepatic bile duct	30,610	4%	
All Sites	856,370	100%	

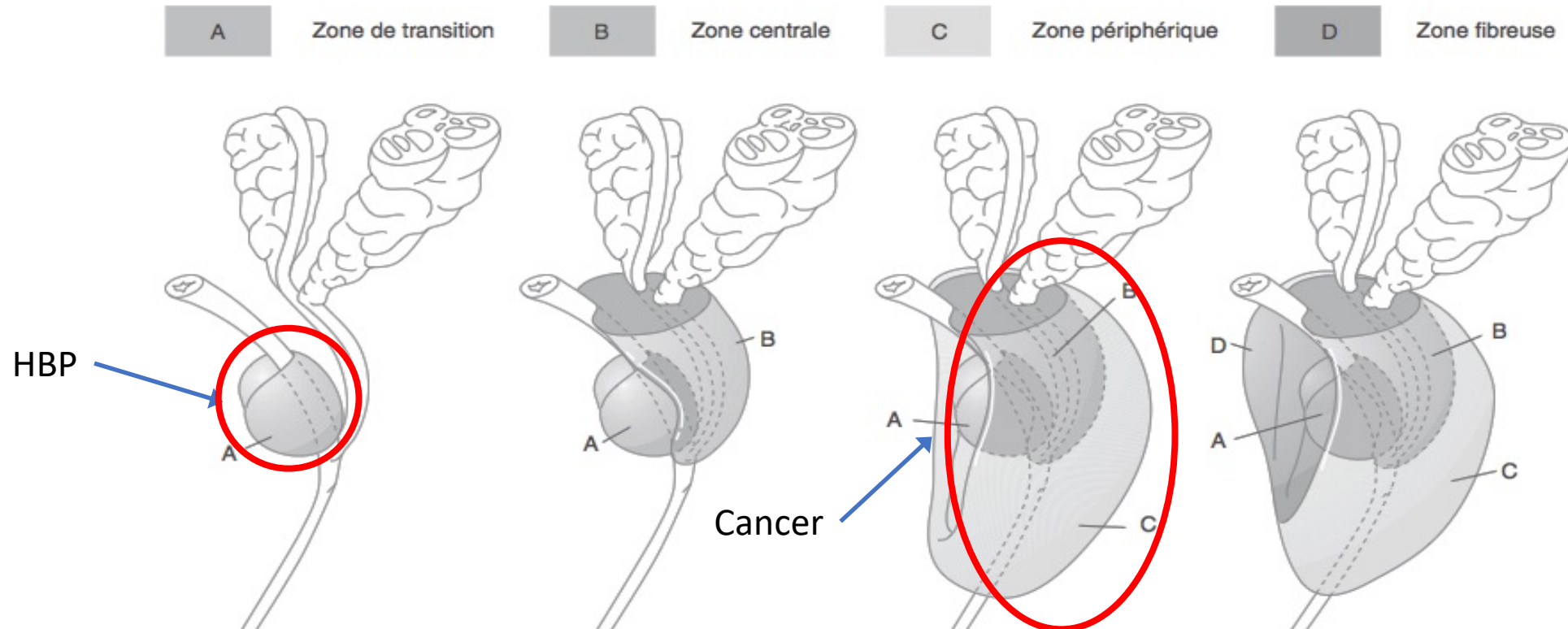
Estimated new cases, USA 2018

Males			
Lung & bronchus	83,550	26%	
Prostate	29,430	9%	
Colon & rectum	27,390	8%	
Pancreas	23,020	7%	
Liver & intrahepatic bile duct	20,540	6%	
Leukemia	14,270	4%	
Esophagus	12,850	4%	
Urinary bladder	12,520	4%	
Non-Hodgkin lymphoma	11,510	4%	
Kidney & renal pelvis	10,010	3%	
All Sites	323,630	100%	

Estimated deaths, USA 2018

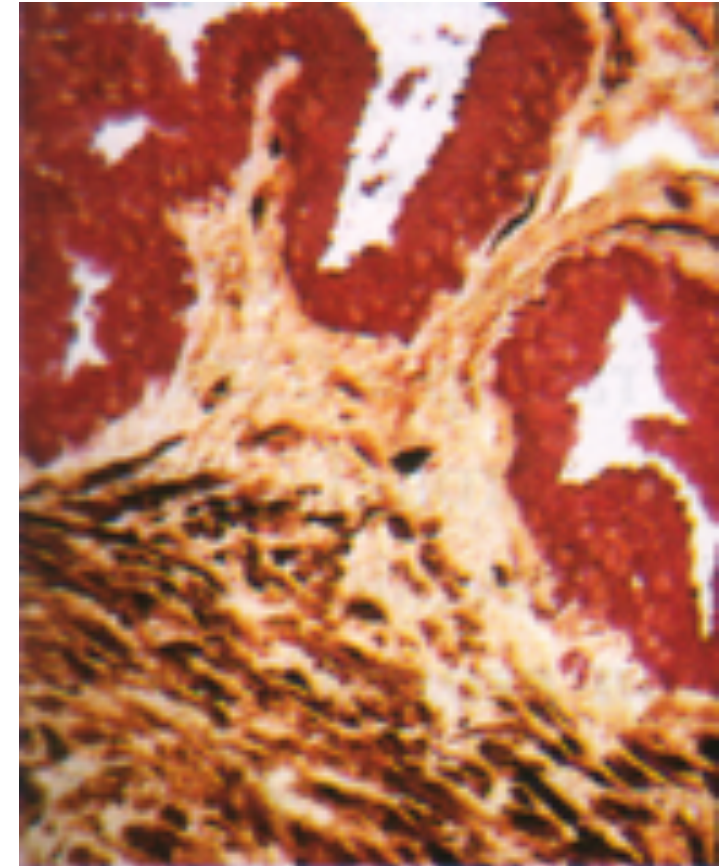
- **Facteurs de risque :**
 - Age.
 - Antcds familiaux : 2 cas dans la famille
=> $RR = 2$.
 - Origines ethniques (Noirs africains),
alimentation, Environnement.
 - Génétique : Association à d'autres
cancers :
 - Cancer du sein = R.
 - Cancer du cerveau : gène
prédisposant « CAPB ».

SITUATION GENERALE



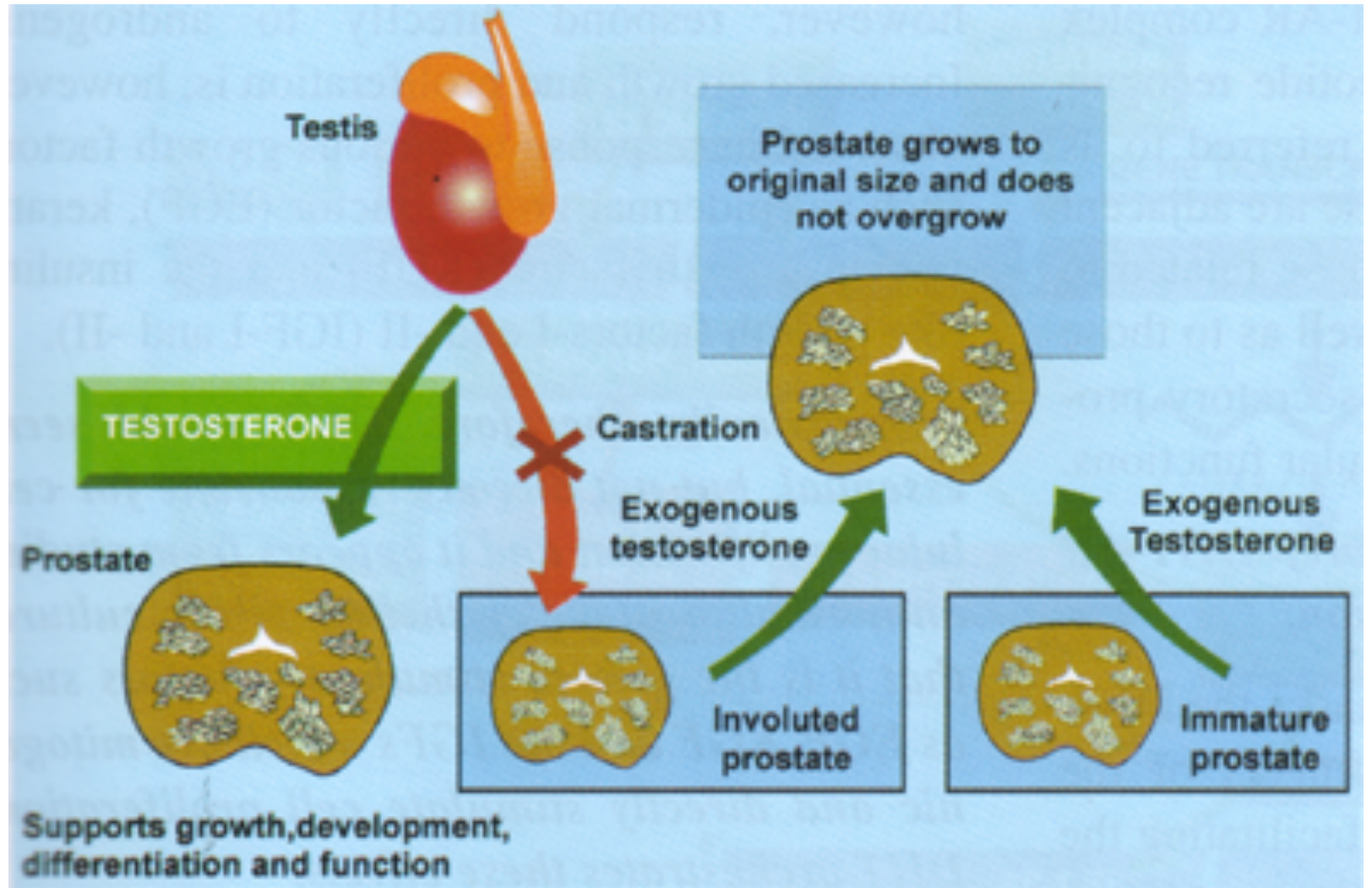
PHYSIOLOGIE DE LA PROSTATE

- La fonction principale de la prostate est de participer à la formation du sperme.
- Sa structure est glandulaire, avec un stroma fibro-musculaire :
 - Glandes exocrines.
 - Fibres musculaires lisses.
 - Fibres collagènes.
- Son développement nécessite la présence d'androgènes (Hunter, 18ème siècle).

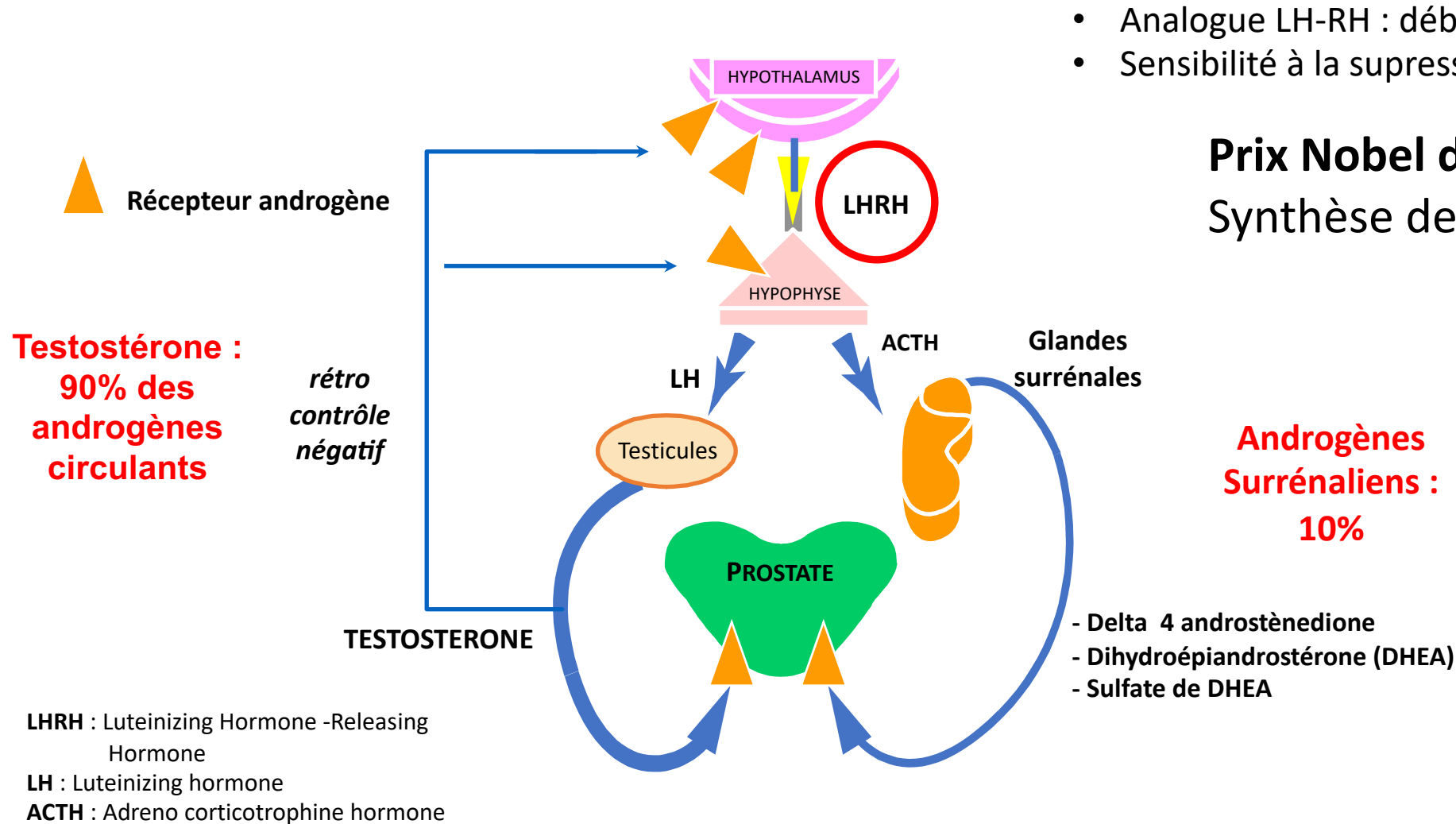


LA PROSTATE EST ANDROGÉNO-DÉPENDANTE

Prix Nobel de médecine 1966
Androgéno dépendance



AXE HYPOTHALAMO-HYPOPHYSAIRE



- Analogue LH-RH : début 70, blocage hormonal CaP.
- Sensibilité à la suppression androgénique temporaire.

Prix Nobel de médecine 1977
Synthèse des agonistes LH-RH