

Measuring adherence to European Society of Cardiology guidelines for patients treated with trastuzumab



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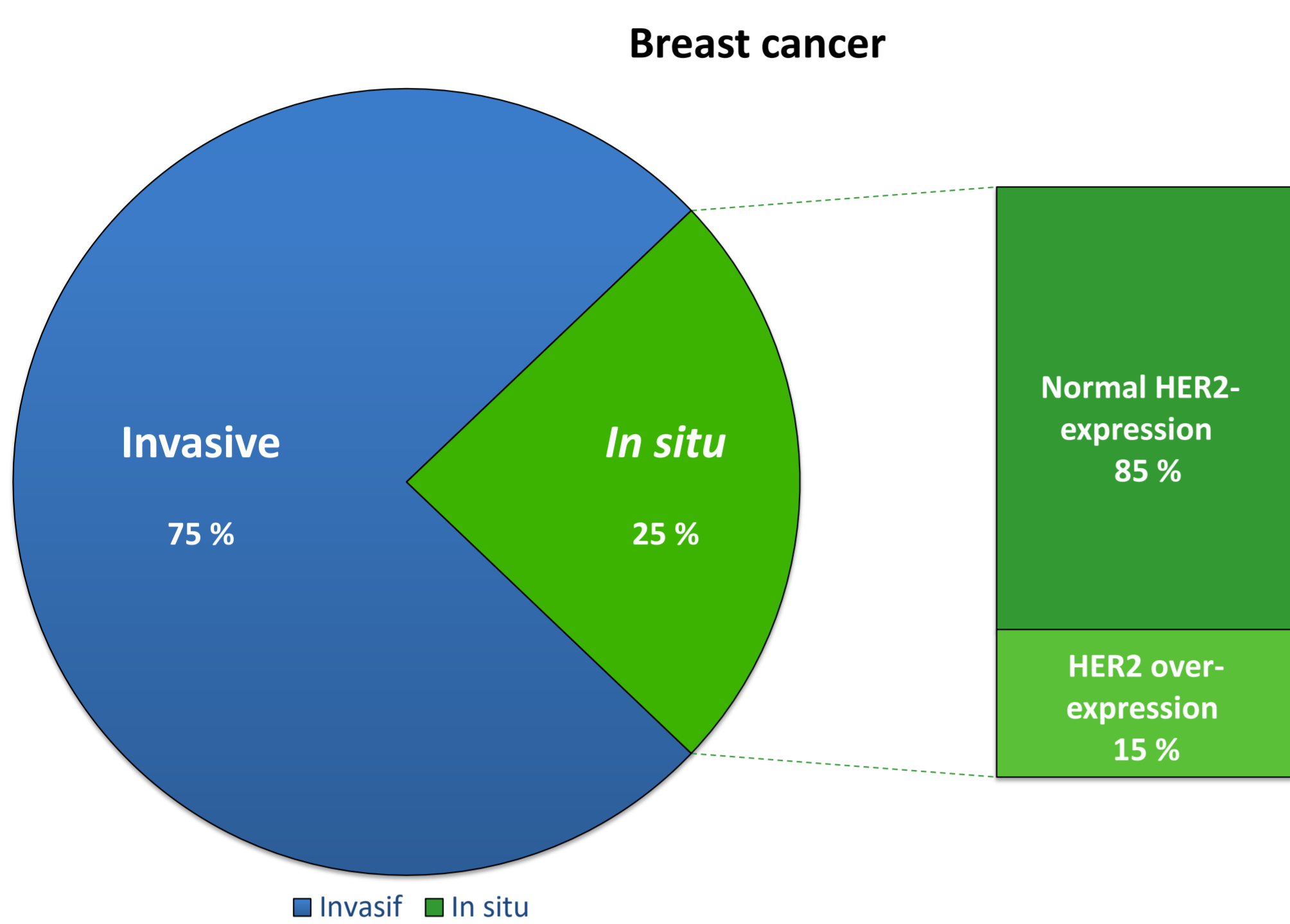
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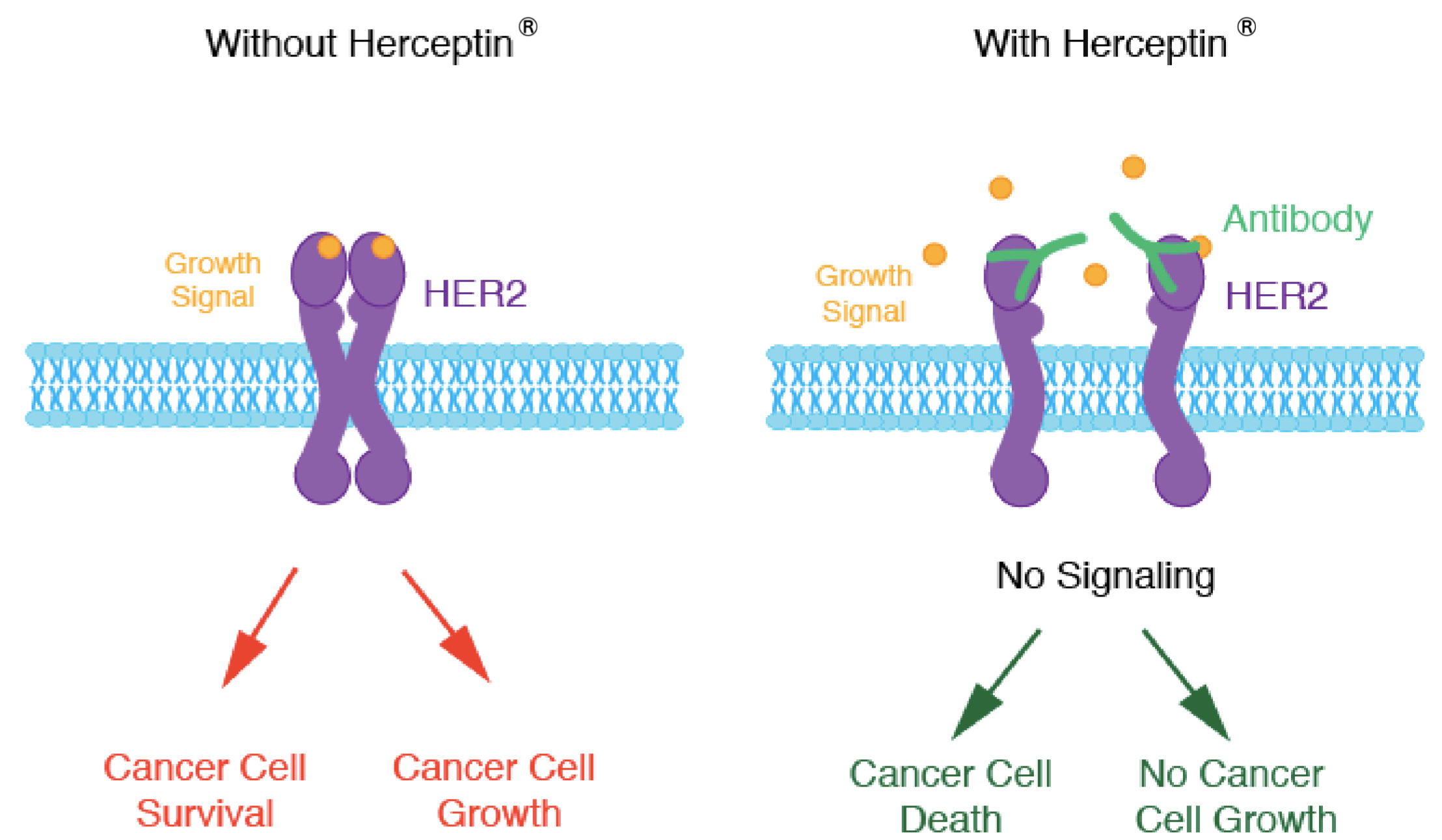
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Background: There are two types of breast cancer.

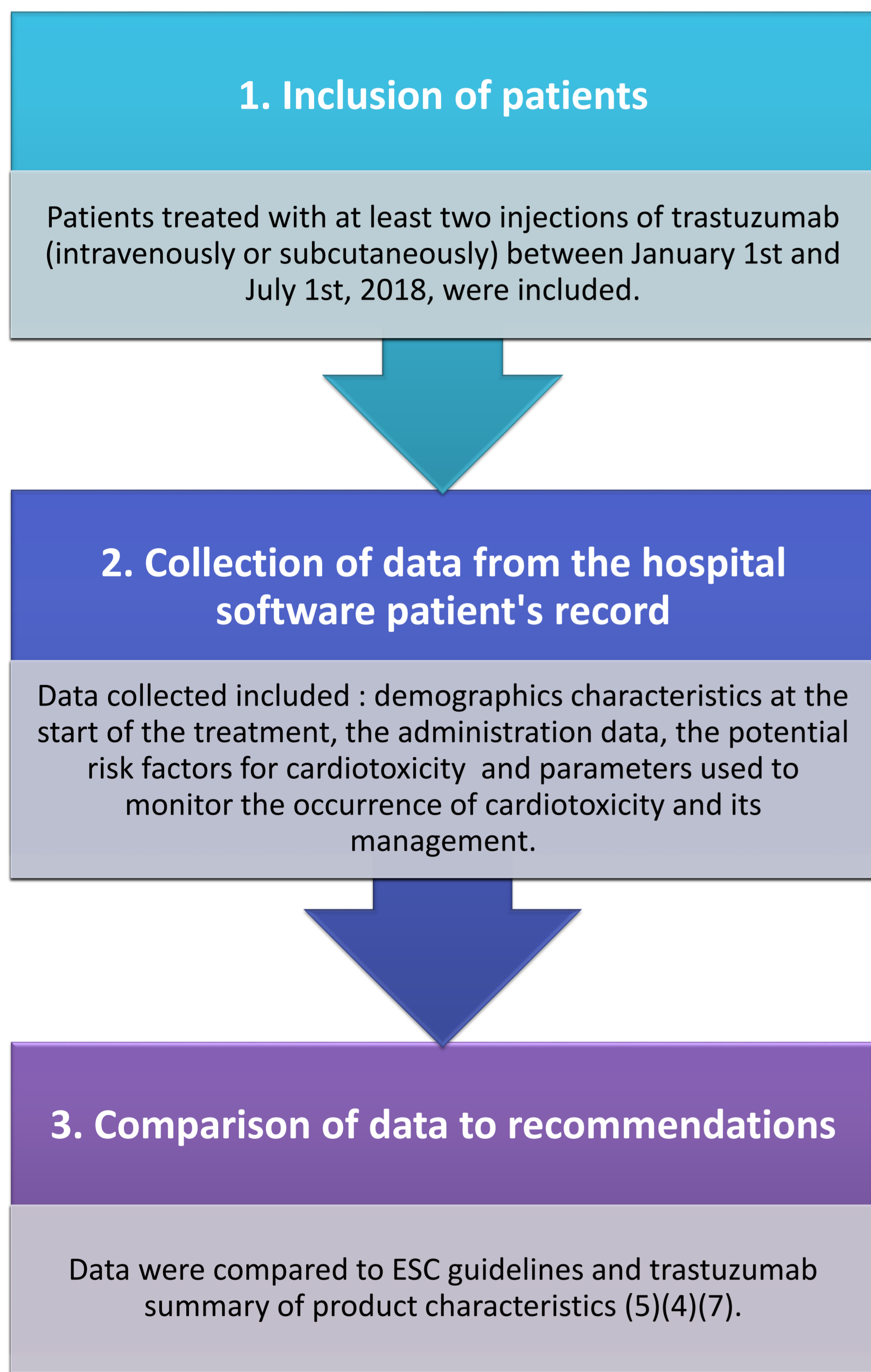


Objective: The aim of the study was to assess the adherence to cardiac toxicity monitoring recommended by the European Society of Cardiology (ESC) in patients treated with trastuzumab.

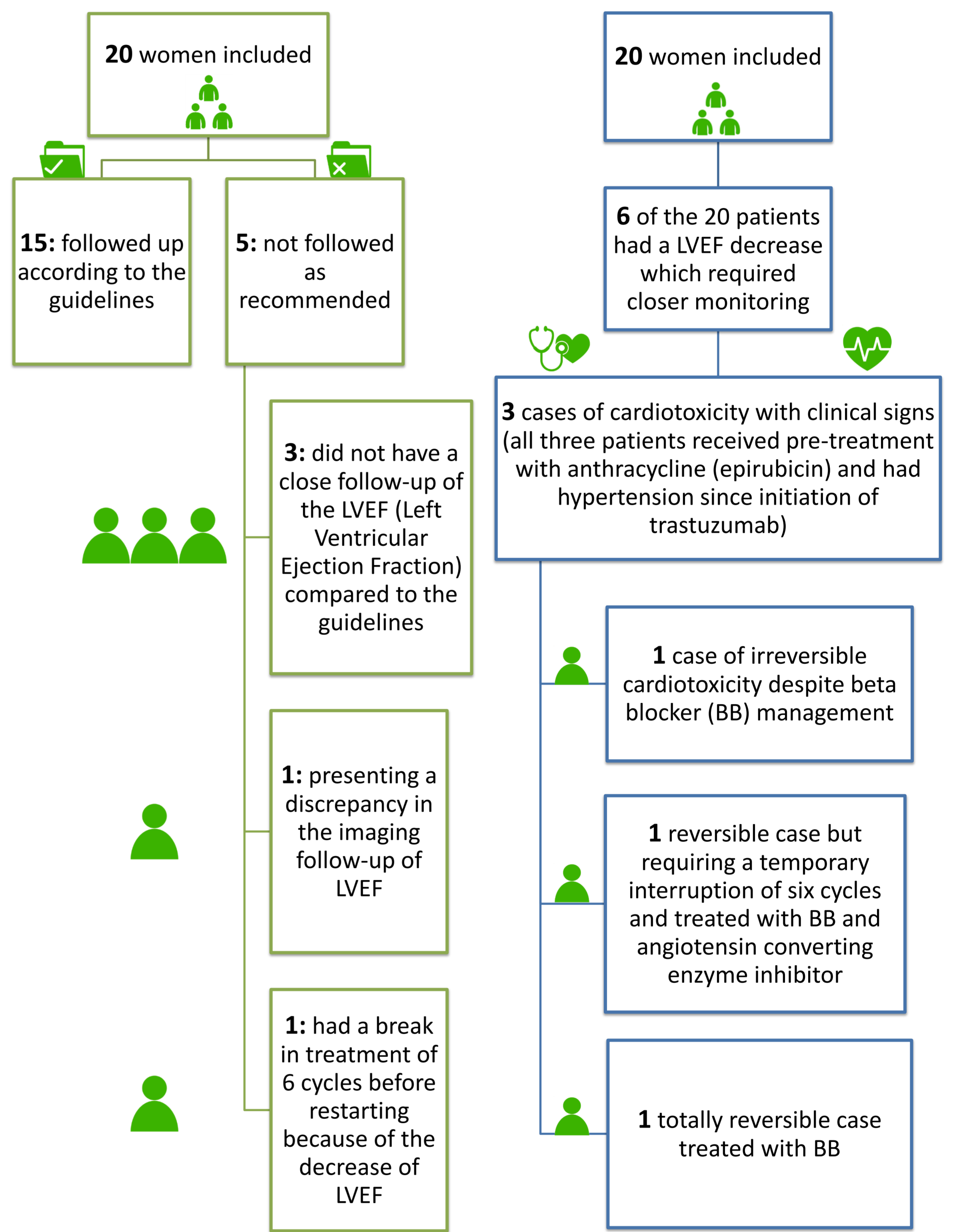


Trastuzumab specifically targets Human Epidermal Growth Factor Receptor-2 (HER2) (1)(2). Nevertheless, this molecule has a partially reversible cardiotoxicity (3) in 4.6 to 34% of patients (4)(5). Monitoring of cardiotoxicity should be implemented according to the ESC.

Methods:



Results:



Epidemiological and therapeutic characteristics of patients:

Average age (years)	61,3 ± 14,4**	
Average BMI* (kg/m ²)	26 ± 7,4**	
Patients treated intravenously (%)	15	
Patients treated subcutaneously (%)	75	
Average number of cycles	13,5 ± 7,4**	
Potential risk factors of cardiotoxicity	Patients pre-treated with anthracycline (%)	40
	Average total epirubicin dose of pre-treated patients (mg/m ²)	323,8 ± 48,7**
	Patients with hypertension (%)	40
	Patients with dyslipidemia (%)	10
	Patients with diabetes (%)	10
Number of patients followed by echocardiography (%)	20	
Number of patients followed by myocardial perfusion imaging (%)	80	

*BMI = Body Mass Index **: average ± standard deviation

Conclusion: Fifteen patients treated (75 %) were followed up in accordance with the recommendation. The appearance of cardiotoxicity seems to be favored by some previous events as mentioned in the literature (3)(5)(6). Nevertheless, since the number of patients included is small, a larger study should support these results.

Sources:

- Cancer du sein : les chiffres du cancer du sein [Internet]. [cited 2018 Jul 23]. Available from: https://www.frn.org/cancer-du-sein/chiffres.html?gclid=EAlaQobChMI70L2-Pe03AIVirHhCh2iOg3TEAAYASAAEgK0wPD_BwE
- Cancer du sein [Internet]. Ligue contre le cancer. [cited 2018 Jul 26]. Available from: /article/26094_cancer-du-sein
- Mackey JR, Clemons M, Côté MA, Delgado D, Dent S, Paterson A, et al. Cardiac management during adjuvant trastuzumab therapy: recommendations of the Canadian Trastuzumab Working Group. *Curr Oncol Tor Ont*. 2008 Jan;15(1):24–35.
- RCP Trastuzumab [Internet]. [cited 2018 Sep 7]. Available from: http://www.ema.europa.eu/docs/fr_FR/document_library/EPAR_Product_Information/human/000278/WC500074922.pdf
- Zamorano JL, Lancellotti P, Rodriguez Muñoz D, Aboyans V, Asteggiano R, Galderisi M, et al. 2016 ESC Position Paper on cancer treatments and cardiovascular toxicity developed under the auspices of the ESC Committee for Practice Guidelines: The Task Force for cancer treatments and cardiovascular toxicity of the European Society of Cardiology (ESC). *Eur Heart J*. 2016 Sep 21;37(36):2768–801.
- Tan-Chiu E, Yothers G, Romond E, Geyer CE, Ewer M, Keefe D, et al. Assessment of Cardiac Dysfunction in a Randomized Trial Comparing Doxorubicin and Cyclophosphamide Followed by Paclitaxel, With or Without Trastuzumab As Adjuvant Therapy in Node-Positive, Human Epidermal Growth Factor Receptor 2–Overexpressing Breast Cancer: NSABP B-31. *J Clin Oncol*. 2005 Nov;23(31):7811–9.
- Laboratoire ROCHE. Herceptin® (trastuzumab) : rappel de l'importance des mesures de surveillance cardiaque pendant le traitement pour réduire la fréquence et la sévérité des dysfonctionnements ventriculaires gauches et des insuffisances cardiaques congestives [Internet]. 2017 [cited 2018 Sep 7]. Available from: http://ansm.sante.fr/content/download/103487/1311363/attachment/1/file/DHPC_Herceptin_28-03-2017.pdf