

ARRAY-COMPARATIVE GENOMIC HYBRIDIZATION AS A NOVEL HIGH-THROUGHPUT APPROACH IN BLADDER CANCER TREATMENT

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INTRODUCTION

Bladder cancer (BC) is the second most common genitourinary malignancy with high recurrence rates. BC is the sixth tumor with the highest incidence and the eighth one with the highest mortality.



RESULTS

(A) Genomic changes identified in one of the patients of the present study:



cancer worldwide

Despite their high incidence and prevalence, there has been little progress in diagnosis, prognosis and therapy. Since the prognostic tools currently available have limitations and acquired changes in specific genes are thought to be significant in the development of bladder tumours, we needed to improve the research in this field of genetic changes associated with the BC.

AIM: Characterization of the genomic profile of bladder cancer using the array-Comparative Genomic Hybridization (aCGH) technique.

MATERIAL AND METHODS



(B) Ideogram representative of all genomic changes identified:







We did not observe a pattern of chromosomal alterations, as, we did not find imbalances in more than **20% of patients**.

Additionally, the sizes of aberrations detected for the same chromosome were often variable

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Histopathological information from the patients was analyzed and clinical data registered.

CONCLIS

This approach allowed us to identify altered chromosomal regions in bladder cancer comparing to normal tissues. In this way, is possible to map fundamental genes related disease initiation and progression. The correlation between molecular and clinical-pathological data will be fundamental to identify recognized biomarkers with possible to diagnostic and prognostic interest.

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CONTACT The authors would like to thank Foundation for Science and Technology (FCT) through PEst-UID/NEU/04539/2013 and FEDER-028417 and POCI-0145-FEDER-007440) for financial support. We also would like to thank to Regional Center of Liga Portuguesa Contra o Cancro (LPCC) for the scholarship and APU (Portuguese Association of Urology).

