

LTL-543 datasheet

Origin	Primary human bladder cancer	Histopathology	Urothelial (transitional cell) carcinoma
Year of establishment	2013	Doubling time	8 days (sub-renal capsule grafting)
Local invasion	Yes, limited	Metastasis	No

The LTL-543 (Figure 1) was developed from a patient's primary urothelial (transitional cell) carcinoma. Histopathologically it closely resembles patient's cancer tissue before grafting (Figure 2). When grafted under the renal capsules of SCID mice, the LTL-543 shows limited local invasion into adjacent host kidney parenchyma. No metastasis was observed in hosts. Viable tissues in early generations have been preserved following by cryopreservation (DMSO), and can be readily resurrected for grafting.

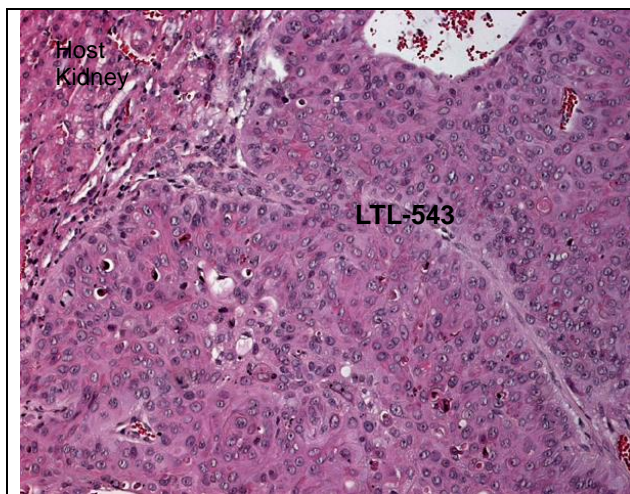


Fig 1. H&E stained LTL-543 tissue sections.

Showing a high grade urothelial (transitional cell) carcinoma grafted under the renal capsule of a NOD SCID mouse, with histopathological characteristics similar to those of the original patient's cancer (Fig. 2). (x200)

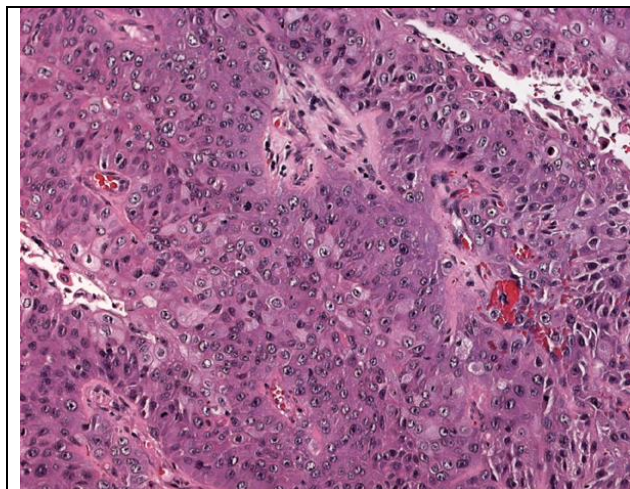


Fig 2. Patient's cancer tissue before grafting.

Major characteristics:

- high grade urothelial carcinoma;
- papillary or non-papillary growth;
- enlarged nuclei with conspicuous nucleoli, loss of polarity;
- voluminous cytoplasm

(x200)

Genetic and epigenetic characteristics

Tissue microarrays containing LTL-543 tissue are available for screening potential molecular targets.

Applications

1. Pre-clinical evaluation of existing and potential anticancer drugs. Examination of drug efficacy on tumor growth, cell death (apoptosis, necrosis), metastasis (in combination with metastatic tumor tissue lines) and angiogenesis.
2. Discovery of potential therapeutic and/or biomarkers for drug sensitivity targets.
3. Study of mechanisms underlying tumor growth and progression.

For more information, please contact us by email: LTL@bccrc.ca or phone: **(604) 675 8013**