SHORT TALK

Lytix Biopharma

LTX-315 treatment induces complete and specific regression of dissaminated tumors in a novel mesenchymal three tumor model

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Background

LTX-315 is a membrane active host-defence peptide representing a novel oncolytic treatment principle applied as intralesional therapy.

Aim

To investigate whether LTX-315 induce abscopal effect in a novel rat mescenhymal three-tumor sarcoma model (rTMSC)

Figure 1. Chemical structure of LTX-315

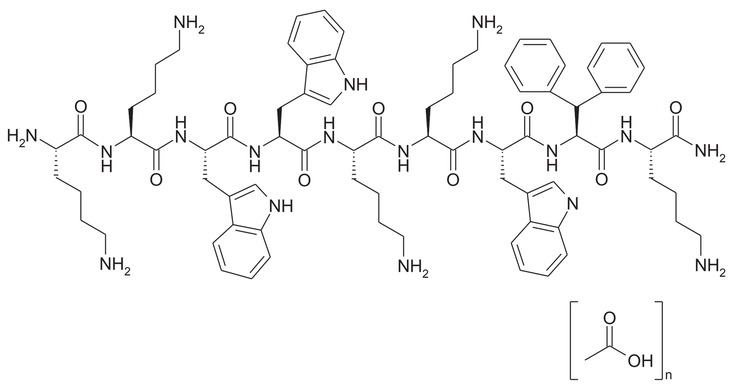
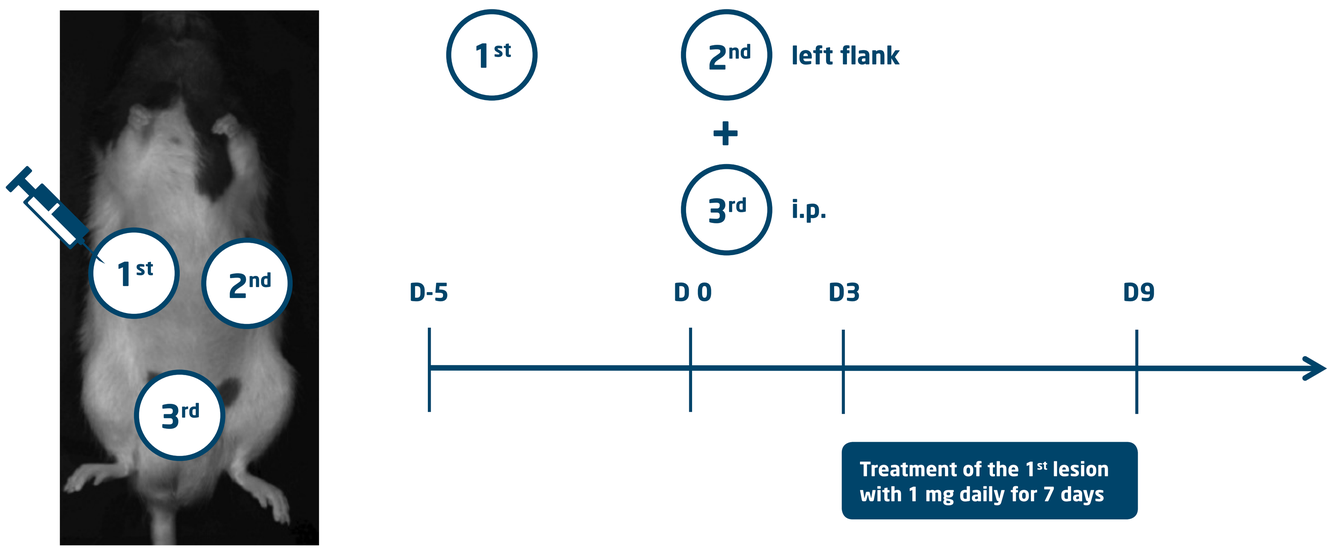


Figure 2. Study design of the three-tumor model



Tumor cells were inoculated s.c. at Day -5 on right flank (1st lesion) and at Day 0 on contralateral flank (second lesion) and i.p. (third lesion) in syngeneic PVG rats. The 1st lesion was treated with 1 mg LTX-315 once daily for 7 subsequent days (days 3 – 9). Representative whole-body bioluminescence images of LTX-315 treated and non treated lesions are presented.

Figure 3. LTX-315 eradicates treated and non-treated lesions in the three-tumor rTMSc model

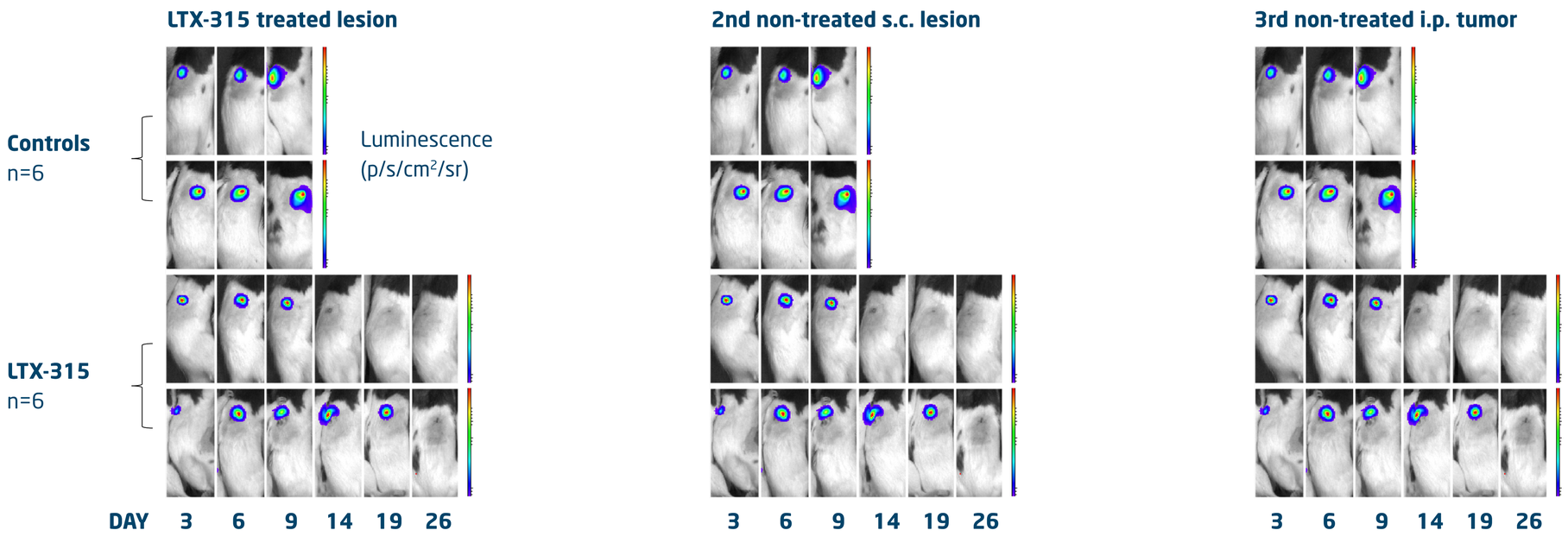
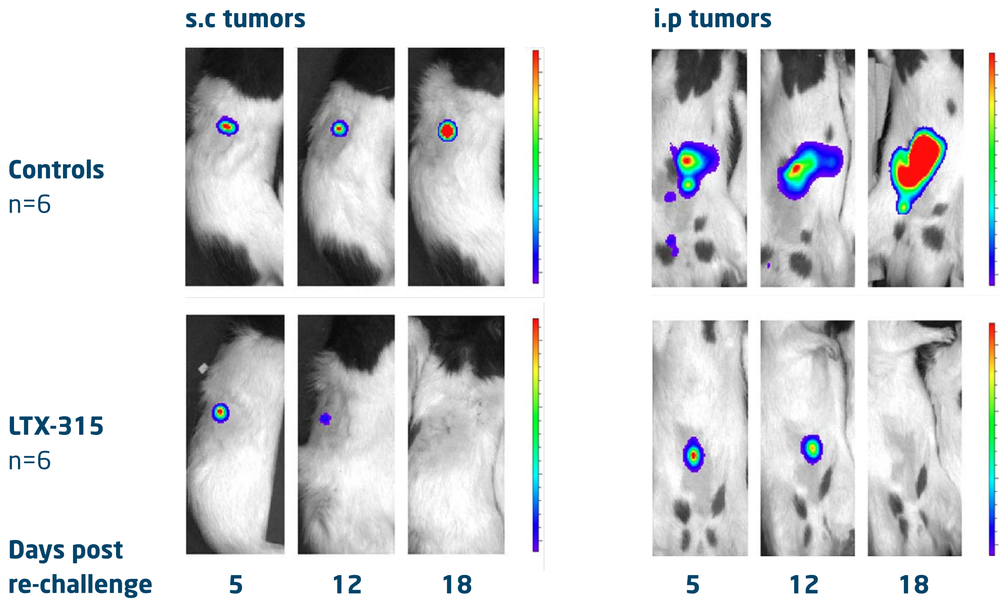


Figure 4. LTX-315 induce long term protective immune responses



Cured animals were re-challenged both s.c. and i.p with rTMSCs eight months later.

Conclusions

- Here we show for the first time that intralesional treatment of one single lesion with LTX-315 (Oncopore™) is sufficient to cure animals with disseminated tumors.
- Systemic and long lasting protective immune responses was obtained in LTX-315 cured animals
- LTX-315 represents a novel intralesional therapeutic strategy with potential to induce clinical responses in metastatic diseases.
- A phase 1/2a study is in progress with LTX-315.

References

Camilio et al., Cancer Immunol Immunther, 2014.
Berge G et al., Cancer Immunol Immunther, 2010.

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