

### bpifrance



### **Therapy Against Senescence**

## 

### Detrimental senescent cells offer multiple targets : Focus on senescence associated to cancer treatment



### Focus on senescence associated to cancer treatment

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- Senescent fibroblasts is our proof of concept for the identification of potential targets
- Senescence induction by chemotherapy and/or radiotherapy in normal and cancer cells



A precise characterization of senescent cells in associated to cancer treatment is necessary to develop specific therapies

## Cancer treatment induced senescence is a key driver of patient bad prognosis

- Cancer therapies (chemo- and radiotherapy) are great inducers of senescence in cancer and normal cells
- Pro-senescent response is associated to advert biological effects
- Senescence associated to cancer treatment impacts the general state of patients: cardiac dysfunction, fatigue, physical decline



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# Strategy to eliminate senescent cells : "one-two punch cancer therapy"





#### Schema of one-two punch therapy

- 1. Classical cancer therapies treatment (chemotherapy,radiotherapy, targeted therapy) induce senescence
- 2. Senotherapy to eliminate specifically senescent cells during cancer treatment and avoid relapse and resistance

## Our approach to identify potential target on senescent cells surface



#### Non senescent cells



**Senescent cells** 

# Pipeline of StarkAge Therapeutics – Senescence associated to cancer treatment



Name	Indications	Research	Preclinical development	IND enabling	Phase 1
SaTX-1 (DPP4 antibody)					
SaTX-2 (patent ongoing)	Senescence associated to cancer treatment		•		
SaTX-3 (patent ongoing)			,		

## Collaboration between StarkAge Therapeutics team and scientific advisory board

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