

EVOLUTION OF IMMUNO-ONCOLOGY CLINICAL TRIALS IN A TERTIARY UNIVERSITY HOSPITAL

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Background

Currently, immunotherapy is a very active area of oncology research. It is a treatment that uses the body's own natural defenses to kill cancer cells. New immunotherapy drugs are showing significant and extended effectiveness, but they are complex and so far, most of them are available only through clinical trials (CT)

Purpose

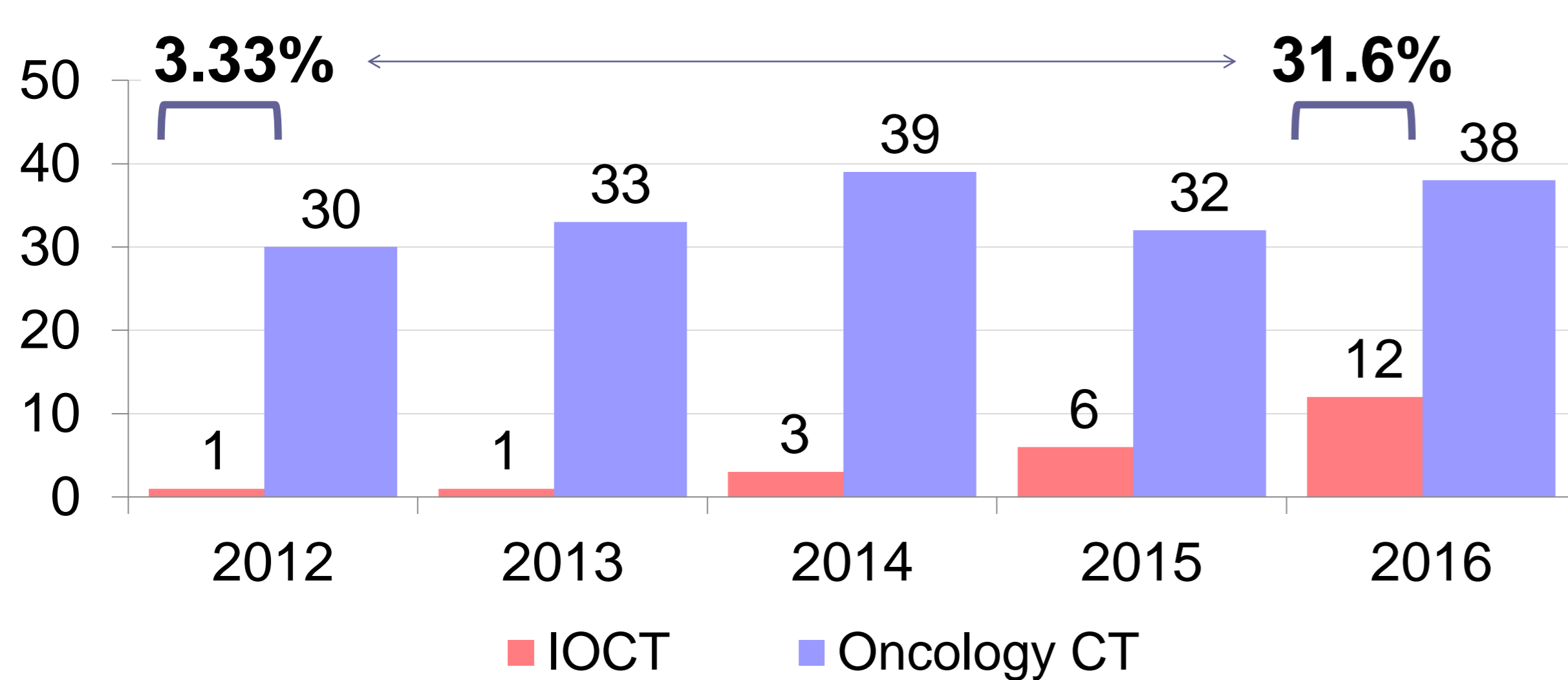
To analyse the evolution of Immuno-Oncology Clinical Trials (IOCT) developed in Oncology Unit during five years (2012-2016) and to evaluate principal characteristics of currently ongoing IOCT.

Methods

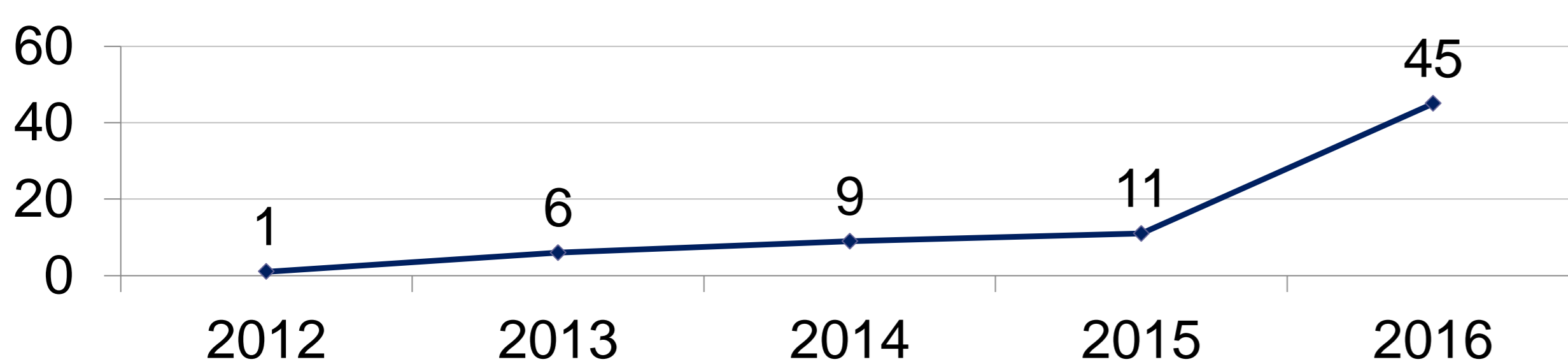
A retrospective analysis of IOCT over five years and descriptive, transversal study about active IOCT were conducted. Variables collected were: study phase, experimental drug, type of experimental therapy (monotherapy, combination with chemotherapy or others), indication, cancer stage, treatment line (first-line, second-line, third-line or maintenance) and number of patients included. Data was extracted from electronic clinical trials database (PK-ensayos™)

Results

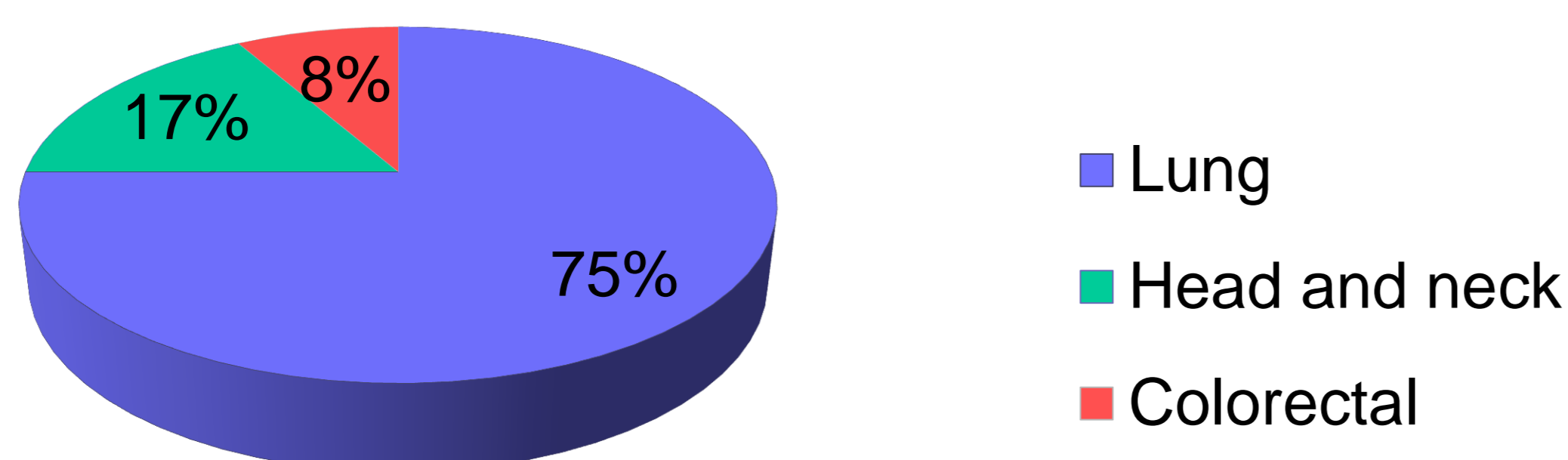
Number of Oncology CT and IOCT (2012-2016)



Number of patients included in IOCT (2012-2016)



Diseases investigated in active IOCT (2016)



Immunotherapy drugs investigated in active IOCT (2016)

Immune checkpoints	Drug	% of active IOCT	
Anti-PD-1	Pembrolizumab	33.3 %	41.6%
	Nivolumab	8.3%	
Anti-PD-L1	Atezolizumab	41.6%	50%
	Durvalumab	8.3%	
Anti-CTLA-4	Tremelimumab	8.3%	8.3%

Main characteristics of active IOCT (2016)

Characteristics	% IOCT	
Cancer Stage	Stage I-III	25%
	Stage IV	75%
Phase	2	25%
	3	75%
Treatment line	1 st	50%
	2 nd	16.6%
	3 rd	8.3%
	Maintenance	25%
Type of treatment	Monotherapy	66%
	Combined with chemotherapy	25%
	Two immune checkpoints inhibitors	8.3%

Conclusions

The rapidly progress of cancer immunology has produced an high increase in IOCT. In our hospital, most of ongoing clinical trials are evaluating immune checkpoints inhibitors in monotherapy for advanced lung cancer. CT are critical to bringing new and potentially effective treatments to more patients, and may represent the greatest hope for patients currently facing the disease.