

Background

- The long term survival rates for Wilm's Tumor in North America and Europe have increased to almost 85% overall.
- There is an emphasis on "risk based management" where children who are diagnosed with low stage tumors can achieve excellent outcomes with less intensive chemotherapy and radiation.
- While the typical age of presentation is 3yrs or younger, informal observations have suggested older children often have an atypical presentation.
- This study aims to characterize difference of the presentation of Wilm's Tumor patients between a younger and an older age group at Children's Medical Center between 2010 to 2015

Methods

An IRB approved retrospective review of 35 children presenting with Wilm's Tumor at Children's Medical Center of Dallas between April 2010 to 2015 was conducted. Data collected included:

- Age
- Gender
- Race
- Symptoms
- Tumor Stage
- Tumor Histology
- Outcome

These data points were stratified between two age groups, either younger or older than 3 years old (yo).

TABLE 1. DEMOGRAPHICS

	All Patients	Age < 3 yo	Age >3yo	P Value
	n=35	n=16	n=19	
Sex				
Male	16	10	6	
Female	19	6	13*	P = 0.0946
Race				
White	21	7	14*	P= 0.094
Non White	14	9	5	
Age				
Median (Range)	3 yo (7mo- 15yo)			

FIGURE 1. DEMOGRAPHICS

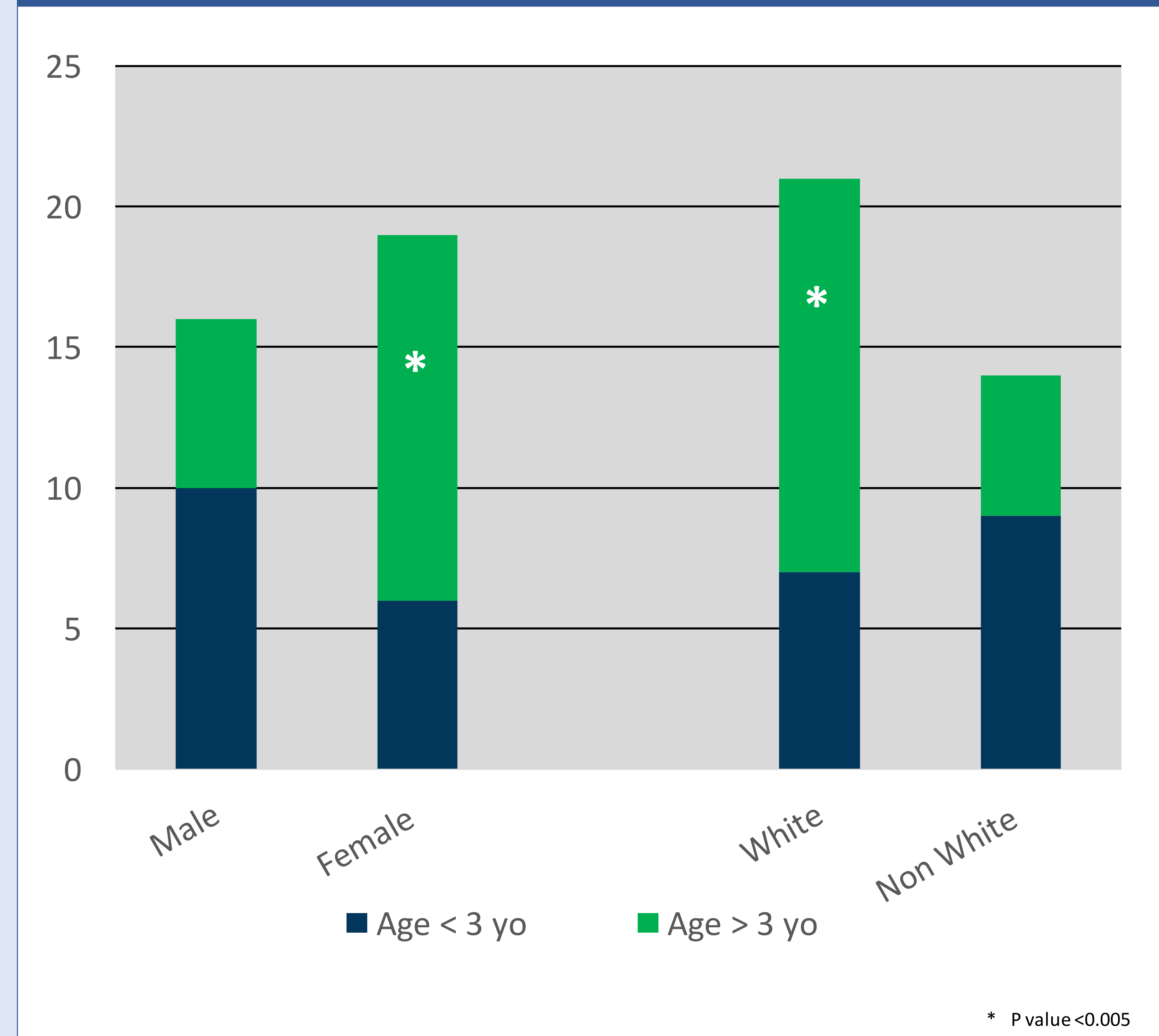
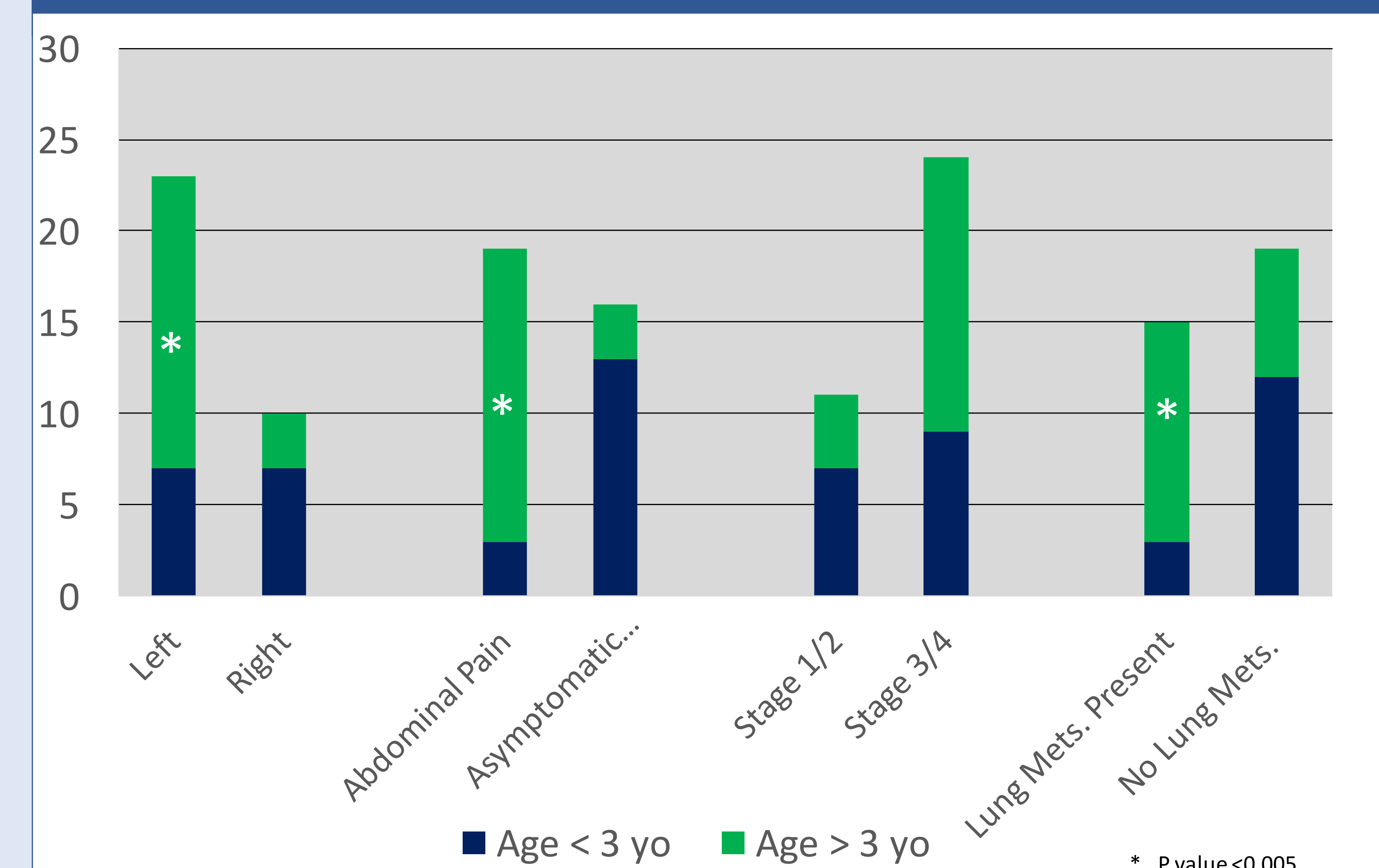


TABLE 2. TUMOR CHARACTERSTICS AT TIME OF SURGERY

	All Patients	Age < 3 yo	Age > 3 yo	P Value
	n=35	n=16	n=19	
Laterality				
Left	23	7	16 *	P = 0.057
Right	10	7	3	
Presenting Symptom				
Abdominal Pain	19	3	16*	P = 0.0002
No Abdominal	16	13	3	
Stage				
1/2	11	7	4	
3/4	24	9	15	
Lung Metastases				
Yes	15	3	12*	P = 0.02
No	19	12	7	

FIGURE 2. TUMOR CHARACTERSTICS AT SURGERY



Conclusions

Compared to patients younger than 3 yo at time of surgery, patients older than 3 yo were:

- more likely to present as female (p= 0.0946) and white (p= 0.094).
- more likely to have left-sided tumor laterality (p= 0.057)
- more likely have abdominal pain (p= 0.0002)
- more likely and have lung metastases at time of surgery (p= 0.02).

As this population size was small, further studies characterizing the presentation of Wilms Tumors and following these trends would be valuable in the diagnosis and treatment of this patient population.

References

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