



# Long acting dopamine agonists in clinical practice:

## a comparative multicentre European survey in young and old PD.

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### OBJECTIVE:

To address comparative tolerability/retention rates (minimum 6 months use) of prolonged release dopamine agonists (DAs) such as rotigotine skin patch (RTG), ropinirole (ROP) and pramipexole (PPX) extended release in an European real life population base using post marketing surveillance

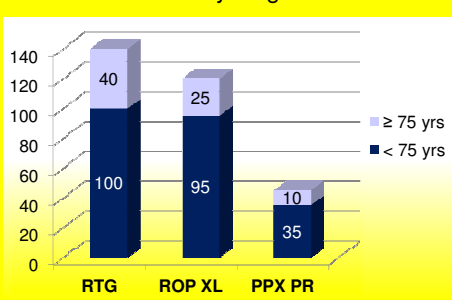
### METHODS:

- Retrospective case note survey of cases initiated on DA using audit based questionnaire (as per study reported by Appiah-Kubi et al.<sup>1</sup>)
- RTG used in 140 (average dose 8.6 mg), ROP XL (n=120; 13.3 mg) and PPX PR (n=45; 2.5 mg) (graph 1)

### BACKGROUND:

- Comparative tolerability/ retention rate of prolonged release DAs are unknown in real life clinical populations which include patients over 75 years of age.
- Tolerability can be addressed by criteria as suggested by Shulman et al.<sup>2</sup> (treatment classed as "tolerated" if sustained for six months or more)
- Specifically side effect issues such as development of impulse control disorder (ICD) during treatment with prolonged release DAs and tolerability of non oral DAs such as RTG in patients with swallowing difficulties have not been studied in detail.

Graph 1: Number of patients on prolonged release DAs in young and old PD



Demographics	Mean/ No	Range/ %/ Median
Patients (Males: Females)	315 (187: 128)	59.4%: 40.6%
Age (yrs)	68.0	37–89
Young (<75 yrs): Old (≥75 yrs)	228: 87	72.4%: 27.6%
Duration of Disease (yrs)	7.9	0–26
Hoehn & Yahr Stage	2.8	3.0 ±2.0

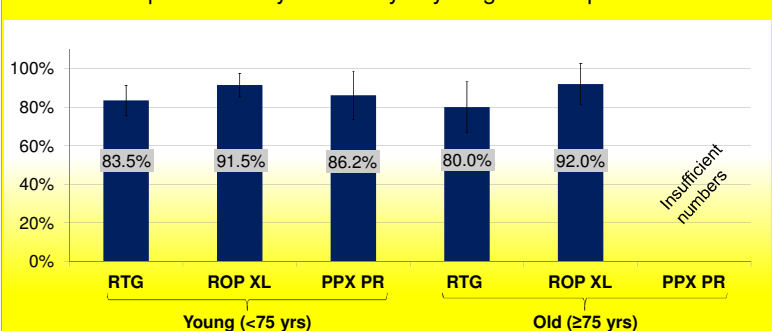
### RESULTS 1:

- 99 of 120 assessable patients (83.5%) on RTG tolerated the drug, 98/107 (91.6%) tolerated ROP XL and 33/37 tolerated PPX PR (89.2%).
- No significant differences of tolerability rates were observed between the prolonged release DAs or between the age groups (graph 2).
- 33 of the 315 evaluated cases (10.5%) report treatment with dual agonists (mostly oral and patch). 4 of those were intolerant of this treatment.

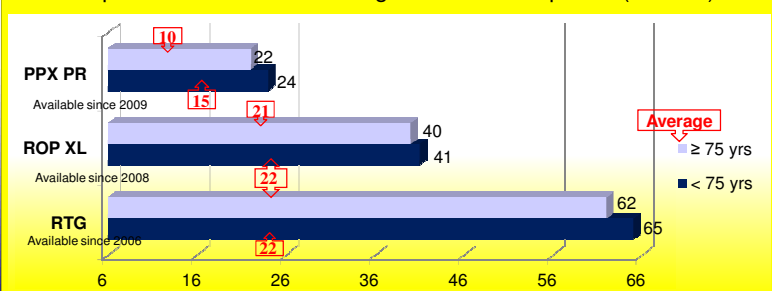
### RESULTS 2:

- 32 cases (10.2%) reported impulse control disorders (ICD), of which 30 were exposed to oral DA.
- Discontinuation due to ICD was reported in 2/140 cases (1.4%) on RTG, 4/120 cases (3.3%) on ROP XL and 1/45 cases (2.2%) on PPX PR.
- 4 cases with ICD on PPX /ROP reported attenuation of ICD when started on RTG patch.
- 25/101 assessed patients (24.8%) suffered from swallowing difficulties, 84.0% of which preferred patch to oral therapy.

Graph 2: Primary tolerability in young and old patients



Graph 3: Maximum and average maintenance period (months)



Main reason for discontinuation (% of total on therapy)	RTG (n=140)		ROP XL (n=120)		PPX PR (n=45)	
	Young (n=100)	Old (n=40)	Young (n=95)	Old (n=25)	Young (n=35)	Old (n=10)
Age: young <75 yrs old ≥75 yrs						
Skin reaction	11.4%	2.1%	N/A	N/A	N/A	N/A
Lack of effect	6.4%	5.7%	2.5%	0%	0%	0%
Hallucination	1.4%	1.4%	2.5%	0.8%	4.4%	N/A
Sleepiness	0.7%	0%	2.5%	0.8%	4.4%	N/A
Confusion	0.7%	2.9%	2.5%	0.8%	0%	N/A

**REFERENCES:** <sup>1</sup> Appiah-Kubi L et al., J Applied Research 2003; 3: 356-362  
<sup>2</sup> Shulman LM et al., Mov Disord 2000; 15(4): 661-668

### ACKNOWLEDGMENTS:

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**CONCLUSIONS:** This ongoing survey reveals prolonged release DAs are well tolerated in younger (< 75yrs) and older (≥ 75yrs) PD including dual agonist use in some. RTG use is particularly tolerated in those with swallowing difficulties. ICD rates are low and in some, reversal is reported after switching to RTG.