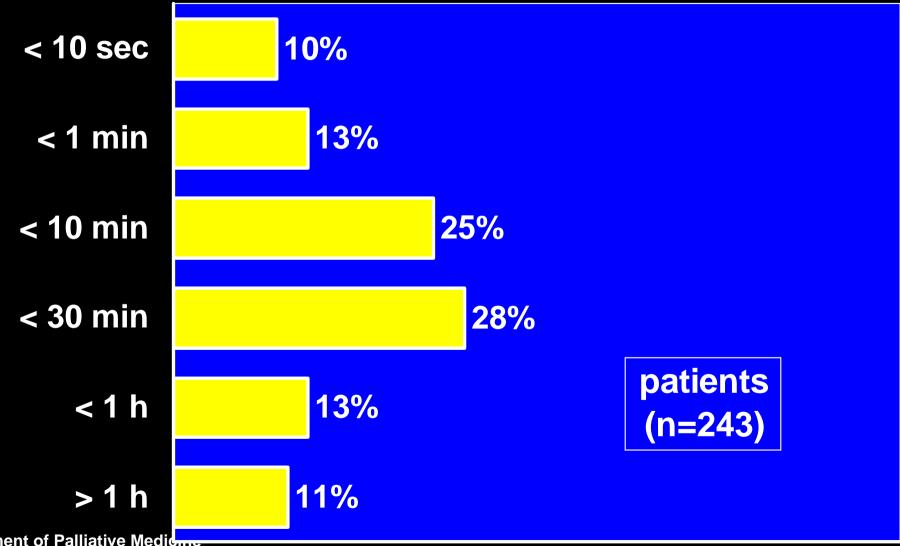
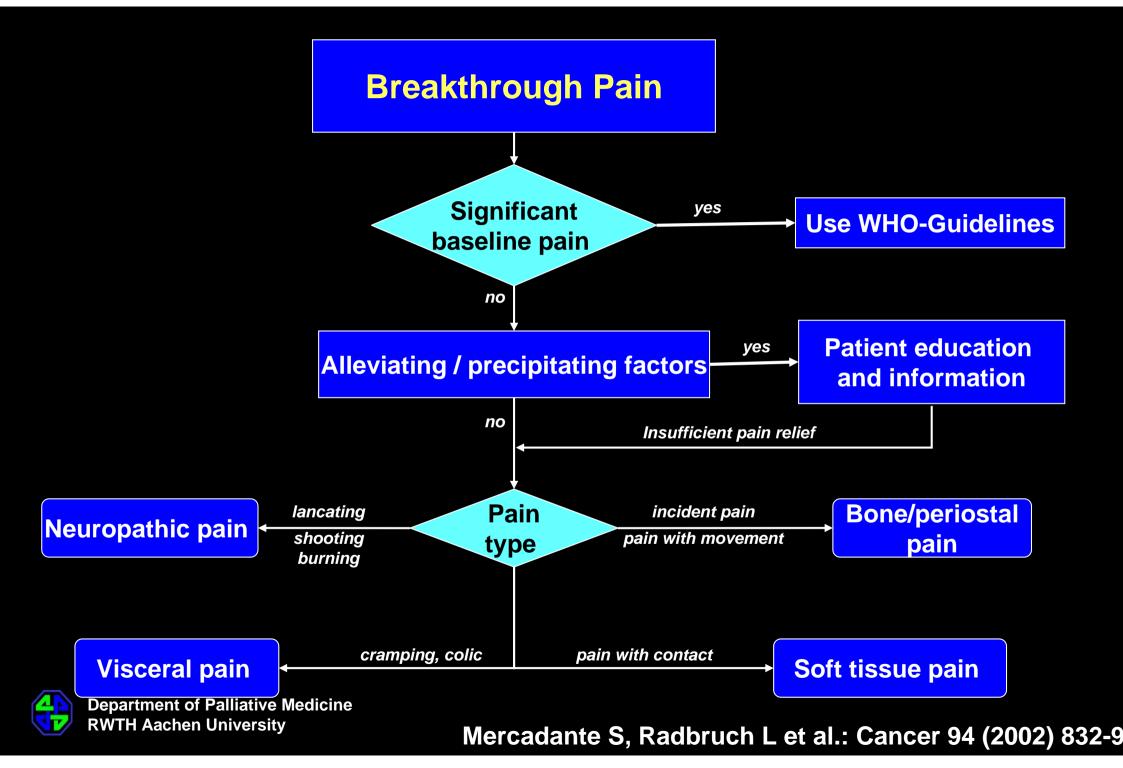
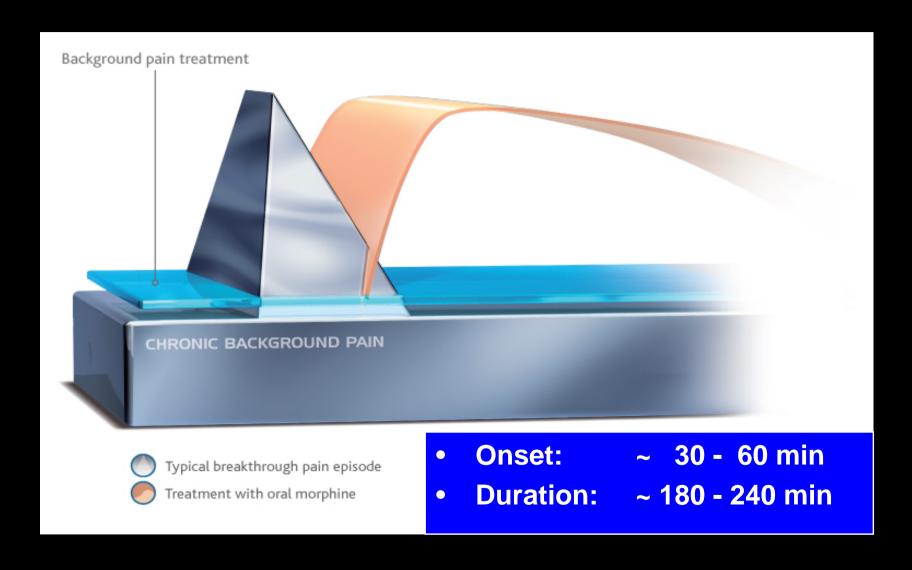
# The Ideal and Future Treatment Options For Breakthrough Pain

# **Breakthrough Pain Duration of episodes**





#### **Immediate release Morphine**



## Laryngeal cancer 67 years, male

*History:* Prostatic cancer 1998,

laryngeal cancer 8/2002 T3N1M0

operation (LE) 9/2002

bone metastases

**Pain:** Continuous pain, NRS 8

Pretreatment: Tramadol 300 mg/d

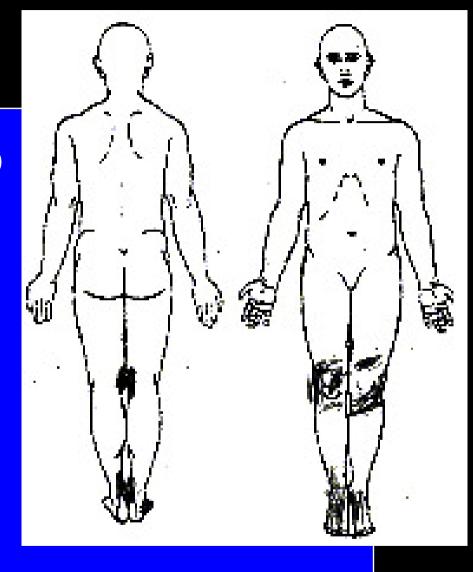
inadequate analgesia

Therapy: Day 1: Actiq 7 sticks

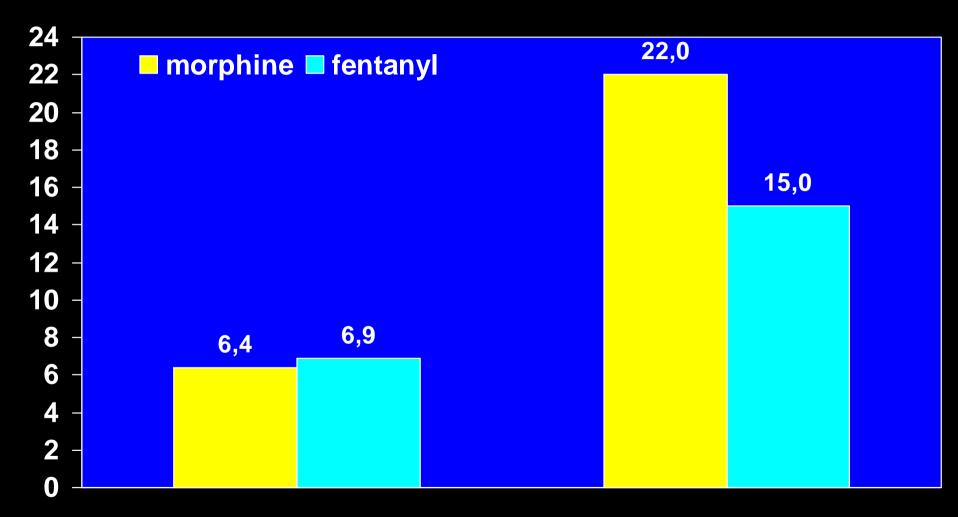
Day 2: TTS 50 μg/h

**Actiq 3 sticks** 

*Pain:* NRS 6 → 3



### Oral Transmucosal Fentanyl Citrate Titration study (n=30)





#### The Ideal Drug for Breakthrough Pain

Acceptability	Patient	Spray vs. tablet
	Physician	Easy to titrate
Costs	Alternatives Region	Morphine, OTFC US vs. Europe CEE, FSU
Safety	Tolerability Abuse	Expected vs. unexpected US vs. Europe Nasal vs. oral

#### Ideal Drug for Breakthrough Pain



#### Oral Transmucosal Fentanyl

Onset:

• T<sub>max</sub>:

Duration:

Bioavailability:

Administration:

~ (10-) 15 min

~ 20 - 40 min

~ 120 min

 $\sim 50 - 65\%$ 

 $\sim 15 - 30 \, \text{min}$ 

### Intranasal Fentanyl Spray

Onset: 7 min

• T<sub>max</sub>: 11 - 16 min

Duration: 56 min

Bioavailability: 89 %

Administration: Spray

Christrup et al. Clin Ther 30 (2008) 469-81

#### **Inhalation Fentanyl**

• Onset: ? min

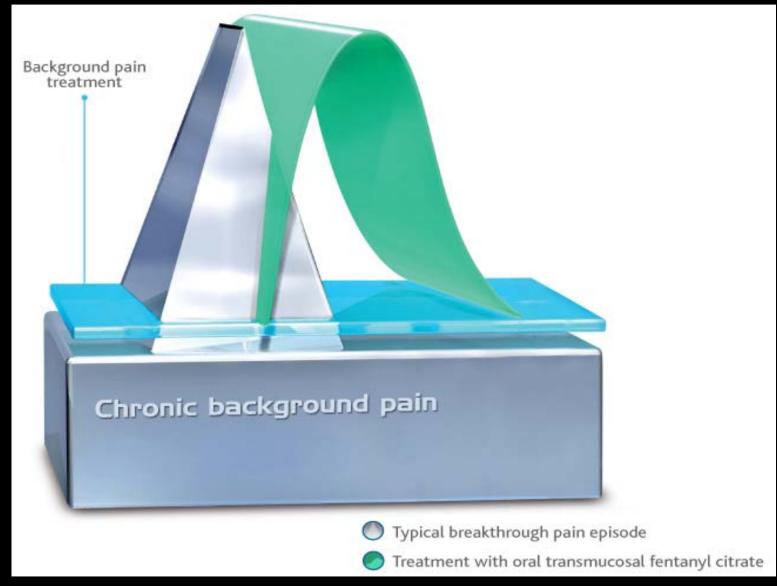
•  $T_{max}$ :

Duration: ~ 60 min

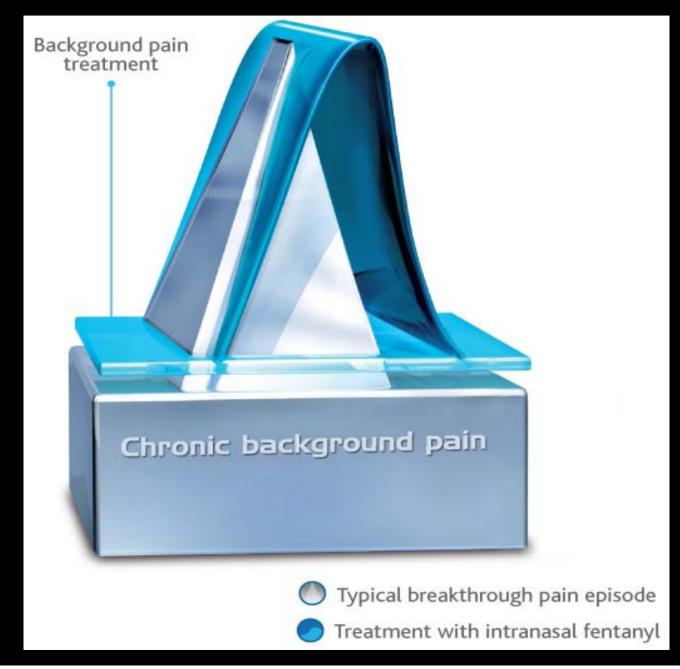
• Bioavailability: >80 %

Administration: Inhaler

#### The Ideal Drug?



#### The Ideal Drug?



#### Conclusion

- Current management of breakthrough cancer pain is suboptimal
- Available treatments do not fulfill the characteristics of the ideal drug for breakthrough pain treatment
- There is a need for a treatment which is easy to use and which provides tight control of the breakthrough cancer pain episode

