Present status of pain management in Belgium

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On behalf the BSMO supportive taskforce and Belgian centers

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Cancer pain management

- Is a big issue
- Pain prevalence ranges from 33% to 59%
- Nearly half of the pts are undertreated
- > 15 million cancer pts worldwide in 2020

Ripamonti CI at; Ann of Oncol 23; vii 139-154 2012

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Table 1. Causes of pain, other than cancer related pain, during natural history of cancer patient

Clinical Setting causes of pain	Acute Procedural Pain	Iatrogenic Pain due to:	Comorbidity-related pain	Pain in cancer survivors
Adjuvant setting	Diagnostic intervention Lumbar puncture ± headache Transthoracic needle biopsy Endoscopy ± visceral dilatation Bone marrow aspiration/ biopsy, Blood sampling, Central line position, Arterial line, Injections, Medication of skin ulcers Myelography and lumbar puncture Thoracocentesis	Surgery, Chemotherapy, Hormonal therapy, Target therapy Osteonecrosis of the jaw Radiation therapy Steroids can cause pain due to: skin lesions, peripheral neuropathy, mucositis aseptic head femoral necrosis, infections	Cardiovascular, Pulmonary Diabetic neuropathy, Vasomotor headache, Fibromyalgia, The comorbidity-related pain may be worsened by anticancer treatments and /or worse cancer-related pain Postherpetic neuralgia Acute thrombosis pain	Follow up procedures Persisting postsurgical pain Persisting anticancer drug-related pain Persisting radiation therapy-related pain Postherpetic neuralgia
Neoadjuvant setting	As adjuvant setting plus: Diagnostic and prognostic tissue biopsy	As adjuvant setting without surgery-related pain	As adjuvant setting	As adjuvant setting
Locally advanced setting	As adjuvant setting plus: Pleurodesis, tumor embolization, Suprapubic catheterization, Nephrostomy insertion	As adjuvant setting, plus: Cryosurgery, Radiothermoablation-high intensity focused ultrasound; Transarterial chemoembolization Spinal/epidural injection; Opioid hyperalgesia	As adjuvant setting	As adjuvant setting
Metastatic setting	As locally advanced setting plus: Liver, lung, soft tissue diagnostic biopsies, Wound care, Movement procedural pain	As neoadjuvant setting	As adjuvant setting	As adjuvant setting plus: Synergistic pain effects between iatrogenic and disease-related causes in long survivors

Apolone G et al: Br J Cancer 2009

How is the cancer pain managed in Belgium?

The pain questionnaire

- Writting committee

  → Dr I. Libert
  → MA. Echterbille
  → Head Nursing M. Obiols
  → Dr M. Matic
  → Dr G. Miedema
  → Dr M. Voordeckers
  → C. Fontaine
  → Prof J. Klasterky

The pain questionnaire(1)

- Institute details
- Pain management organization
- Principles of pain assessment

- Cancer pain therapy

IV. Cancer pain treatment

4.1. For mild, moderate, severe or neuropathic pain, which of the followings would you use?

Drug	Mild pain	Moderate pain	Severe pain	Neuropathic pain
Paracetamol				
Acetylsalicylic acid				
NSAIDs				
Tramadol ☐ **PO** ☐ **IV**				
Tapentadol				
Codeine / dihydocodeine				
Buprénorphine ☐ **patch** ☐ **sublingual**				

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Nefopam				
Metamizole ☐ PO ☐ IV				
Gabapentin				
Pregabalin				
Tricyclic antidepressant				
Duloxetine				
Venlafaxine				
Clonidine ☐ PO ☐ IV				

V. Management of opioid side effects

- Which laxatives do you prescribe and when?

_____

_____

- When do you consider the use of naloxone? What dosage? Which type of naloxone?

_____

_____

- Do you have any experience with methylnaltrexone (Relistor®)? ☐Yes ☐No

What dosage do you use? Please explain.

_____

_____

- What do you routinely use for the management of opioid-related nausea / vomiting?

_____

_____

- What is your current practice to deal with opioid-induced sedation?

_____

_____

- What is your approach to a patient reluctant to take opioids because of the fear of addictions?

_____

VI. Breakthrough pain

- What is your strategy (work-up, preventive measures)?

_____

_____

- Which medications do you use?

_____

_____

- Do you use fentanyl in transmucosal administration? ☐Yes ☐No
Why?

_____

- Do you have any other suggestions / recommendations?

_____

_____

VII. Bone pain

- Is radiation therapy readily available at your center? ☐Yes ☐No

- Which technique do you use most often?

_____

_____

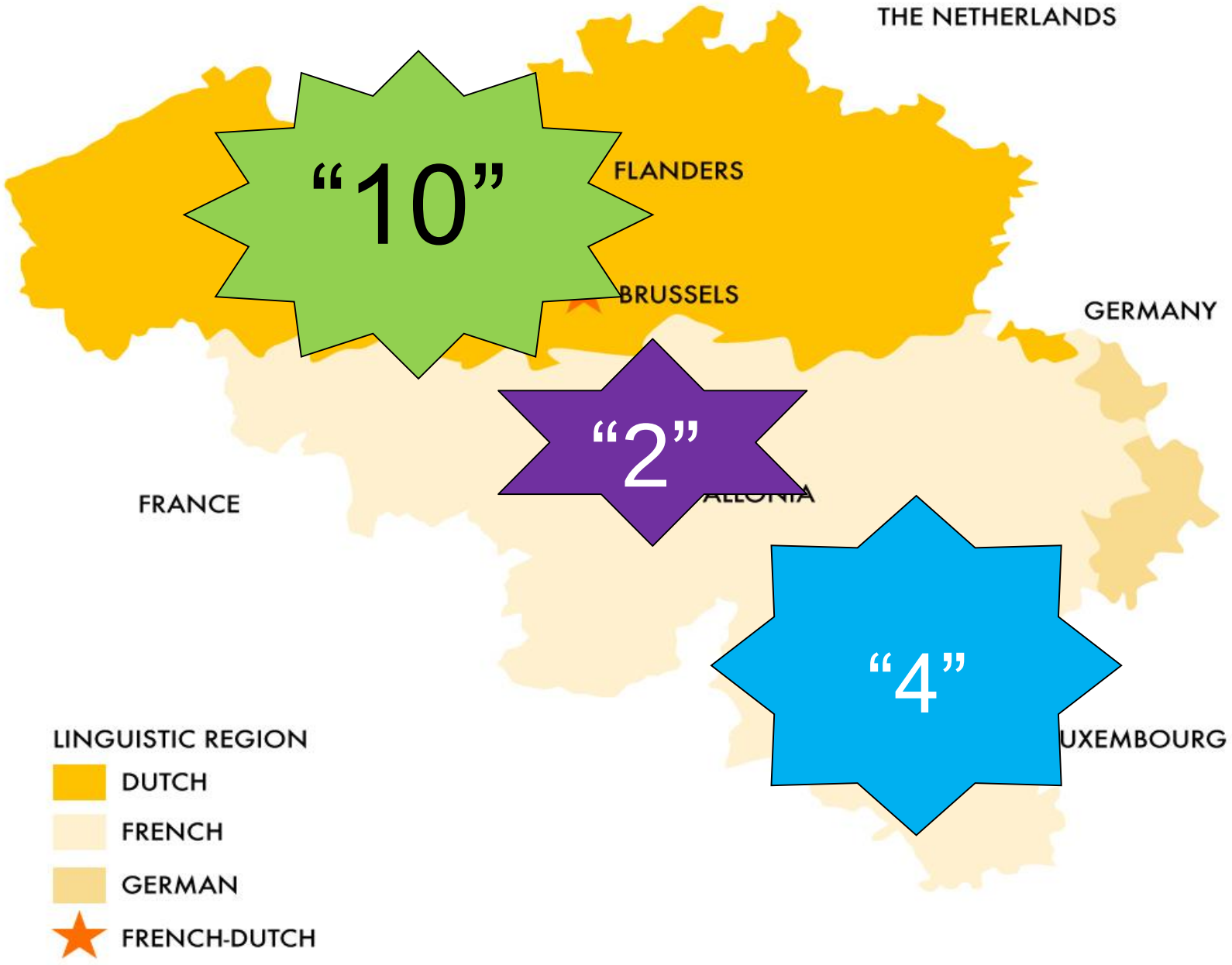
- Is re-irradiation and/ or stereotactic radiotherapy used? ☐Yes ☐No

- Are corticosteroids (or other drugs except anaelgesics) used with radiotherapy? ☐Yes ☐No

Cancer pain management

- Spinal cord compression
- Pain by oral mucositis
- Neuropathic pain
- Invasive management of refractory pain
- Chronic pain

- Psychosocial support


THE NETHERLANDS
"10"
FLANDERS
BRUSSELS
GERMANY
"2"
FRANCE
"4"
LUXEMBOURG
LINGUISTIC REGION
DUTCH
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- AZ Groeninge (Kortrijk)*
- AZ Klina (Brasschaat)*
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- UZ Ghent*

- Institut Jules Bordet*
- UZ Brussel*CHU Brugmann**

- Clinique St-Pierre (Ottignies)**
- Grand Hôpital de Charleroi*
- CHU Charleroi**
- Groupe Jolimont**

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- *Member of the BSMO Supp Care Taskforce
- ** wishing to take part in the BSMO SCTF

Key data from the observational study

BSMO SUPPORTIVE TASKFORCE

Services exclusively for cancer pts

Services	Availability
Medical oncology	16/16 (100%)
Hematology	16/16 (100%)
Daycare hospital	16/16 (100%)
Psycho oncology	16/16 (100%)
Nutrition	16/16 (100%)
Surgery	15/16 (93,75%)
Rehabilitation	15/16 (93,75%)
Laser therapy	15/16 (93,75%)
Radiation oncology	14/16 (87,5%)
Emergency room	14/16 (87,5%)
Geriatric section	13/16 (81,25%)
Intensive care unit	13/16 (81,25%)
Palliative care unit	12/16 (75%)

Services exclusively for cancer pts

Services	Availability
Infectious disease unit	8/16 (50%)
In patient supp care unit	8/16 (50%)
Supportive care for out pts	8/16 (50%)
Daycare	2/16 (12,5%)

Research and teaching

	Yes
Active research on pain management	7/16 (43,75%)
Active teaching program on pain management	11/16 (68,75%)
External teaching programs	12/16 (75%)

Pain management organization

Specific organizations	Number
Are there a specific organizations for pain management?	16/16 (100%)
For out patients	16/16 (100%)
For in patients	16/16 (100%)
Home pts	8/16 (50%)
Pain clinic	15/16 (93,75%)
Palliative care unit	14/16 (87,5%)
Multdisciplinary team	13/16 (81,25%)
Specific consultations	12/16 (75%)
Mobile unit	10/16 (62,5%)
MOC	8/16 (50%)
Supportive care unit	6/16 (37,5%)

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Specific consultations	12/16 (75%)
Mobile unit	10/16 (62,5%)
MOC	8/16 (50%)
Supportive care unit	6/16 (37,5%)

Supportive care units
Only present in 37,5%

Multidisciplinary team for pain management

	Number
Is this different from supp/pall team?	
Yes versus No	**10/16 (62,5%)** versus 5/16 (31,25%)
Is there collaboration with supp/pall team ?	
Yes versus No	**12/16 (75%)** versus 2/16 (12,5%)
What kind of collaboration?	
Pain advice	5/16 (31,25%)
Discussion about invasive procedures	4/16 (25%)
Ad Hoc advice	2/16 (12,5%)
Multidisciplinary advice	2/16 (12,5%)
Pharmacological advice	2/16 (12,5%)
Palliative care	1/12 (6,25%)

Pain assessment: how?

Assessments tools	Number
Do you use them?	
Yes versus no	**13/16 (81,25%)** versus 3/16 (18,7%)
Which ones?	
Pain self assessment	13/16 (81,25%)
Hetero assessment	12/16 (75%)
QOL scale	6/16 (37,5%)
Mood/anxiety scale	6/16 (37,5%)
Multidimensional tools	5/16 (31,25%)

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Validated assessment tools for the assessment of pain

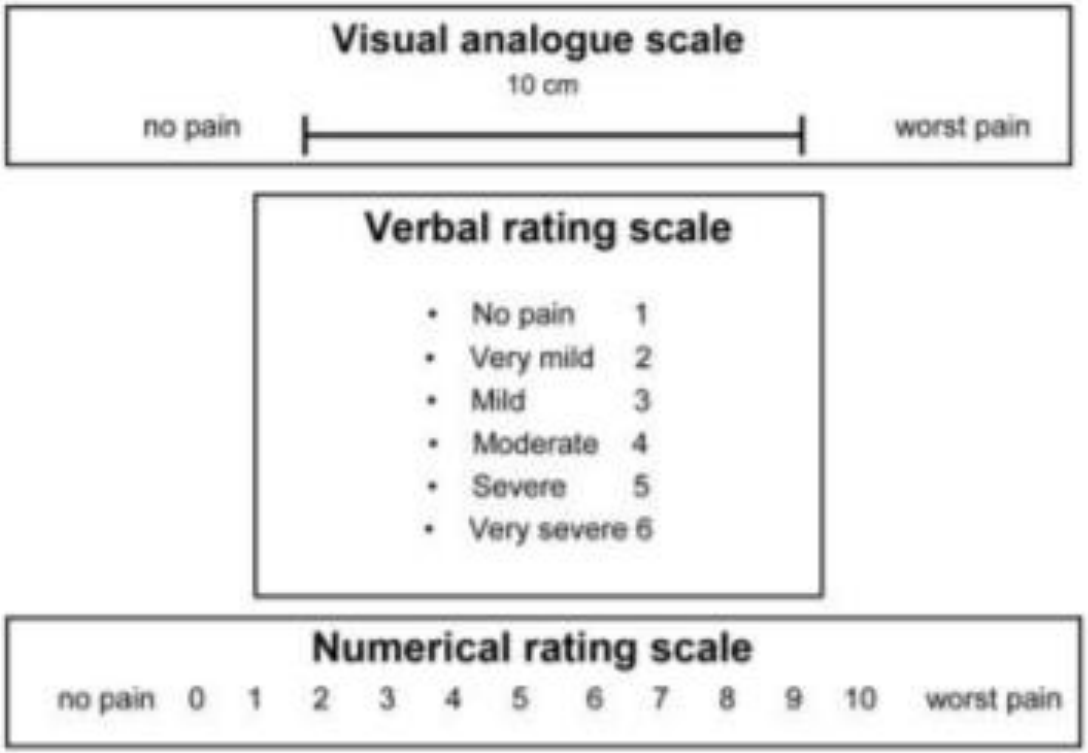

Figure 1 Validated and most frequently used pain assessment tools.

Pain assessment: how?

Assessments tools	Number
Do you use them?	
Yes versus no	**13/16 (81,25%)** versus 3/16 (18,7%)
Which ones?	
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Mood/anxiety scale	6/16 (37,5%)
Multidimensional tools	5/16 (31,25%)

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Pain assessment: how?

Assessment	
For in patients	12/16 (75%)
For out patients	8/16 (50%)
Documented in the file?	
Yes versus No	**11/16 (68,75%)** versus 2/16 (12,5%)
By whom?	
Doctors	10/16 (62,5%)
Nurses	10/16 (62,5%)

ESMO guidelines for pain assessment

- Assess and re-assess the pain
- Assess and re-assess the patient
- Assess and re-assess your ability to inform and communicate with patient and family

Reference to pain guidelines

Pain Guidelines	Number
ESMO	8/16 (50%)
NCCN	3/16 (18,7%)
MASCC	2/16 (12,5%)
PALLIAGUIDE	2/16 (12,5%)
AFSOS	2/16 (12,5%)
WHO	2/16 (12,5%)
KCE	1/16 (6,25%)
Scottisch palliative guideline	1/16 (6,25%)
Canadian guideline	1/16 (6,25%)

What do you communicate?

Principles to be shared with your pts?	Number
Pain control	12/16 (75%)
Breakthrough pain	5/16 (31,25%)
Side effects	4/16 (25%)
Intake medication	4/16 (25%)
Explanation pain mechanism	4/16 (25%)
Check interactions with pharmacist	1/16 (6,25%)
Digital device	1/16 (6,25%)

ESMO guidelines about communication?

- Pts should informed about pain and management
- Communication with the team
- Pts and relatives should be involved

- Chronic pain should be treated on a regular basis
- The oral route should be advocated
- Rescue dose should be prescribed

How do you communicate?

Pts with cognitive impairment	Number
Relatives	**11/16 (68,75%)**
VAS scale	3/16 (18,75%)
PAINAD	2/16 (12,5%)
Pictures	1/16 (6,25%)
Multidisciplinary	1/16 (6,25%)
Pts with psycho-social distress	
Multidisciplinary approach	11/16 (68,75%)
Relatives	8/16 (50%)
Multiples consultations	4/16 (25%)

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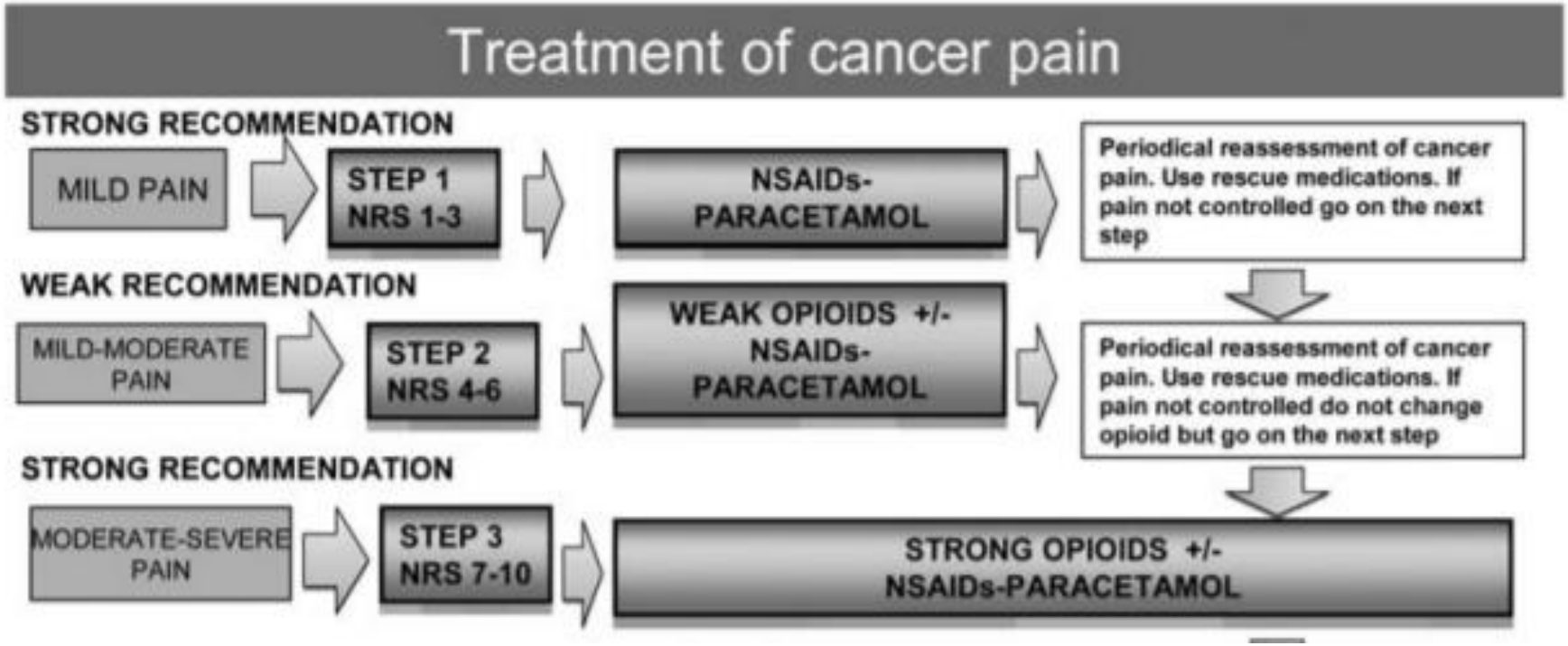
How do the Belgian centers treat cancer pain?

WHO 3-step analgesic ladder in 1986



Cancer pain killers: step 1 & 2

	Mild	Moderate	Severe	Neuropathic
Paracetamol	16/16(100%)	15/16(93,75%)	12/16(75%)	6/16(37,5%)
NSAID	8/16(50%)	15/16(93,75%)	11/16(68,75%)	3/16(18,75%)
Acetylsalicyclic acid	7/16(43,75%)	5/16(31,25%)	3/16(18,75%)	
Metamizole PO Metamizole IV	2/16(12,5%)	3/16(18,75%)	4/16(25%) 1/16(6,25%)	
Codeine Dihydrocodeine	5/16(31,25%)	5/16(31,25%)		
Tramadol	4/16(25%)	15/16(93,75%)	10/16(62,5%)	4/16(25%)

Cancer pain killers: step 1 & 2

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Paracetamol	16/16(100%)	15/16(93,75%)	12/16(75%)	6/16(37,5%)
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Codeine Dihydrocodeine	5/16(31,25%)	5/16(31,25%)		
Tramadol	4/16(25%)	15/16(93,75%)	10/16(62,5%)	4/16(25%)

Cancer pain killers: step 3

	Mild	Moderate	Severe	Neuropathic
Strong opioids (morphine)		6/16(37,5%)	16/16(100%)	10/16(62,5%)
Tapentadol		3/16(18,75%)	6/16(37,5%)	4/16(25%)
Piritramide		2/16(12,5%)	6/16(37,5%)	
Metadone po		1/16(6,25%)	5/16(31,25%)	2/16(12,5%)
Metadone IV			1/16(6,25%)	1/16(6,25%)

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Cancer pain killers: step 3

	Mild	Moderate	Severe	Neuropathic
Strong opiods		6/16(37,5%)	16/16(100%)	10/16(62,5%)
Tapentadol		3/16(18,75%)	6/16(37,5%)	4/16(25%)
Piritramide		2/16(12,5%)	6/16(37,5%)	
Metadone po		1/16(6,25%)	5/16(31,25%)	2/16(12,5%)
Metadone IV			1/16(6,25%)	1/16(6,25%)

Cancer pain killers: patches and others

Patches	Mild	Moderate	Severe	Neuropathic
Buprenorphine		9/16(56,25%)	13/16(81,25%)	7/16(43,75%)
Fentanyl		3/16(18,75%)	7/16(43,75%)	2/16(12,5%)
Emla	9/16(56,25%)	3/16(18,75%)	4/16(25%)	4/16(25%)
Capsacin		3/16(18,75%)	1/16(6,25%)	4/16(25%)
Others				
MEOPA	2/16(12,5%)	3/16(18,7%)	4/16(25%)	1/16(6,25%)
Cannaboids	2/16(12,5%)	2/16(12,5%)	5/16(31,25%)	3/16(18,75%)

Cancer pain killers: patches and others

Patches	Mild	Moderate	Severe	Neuropathic
Buprenorphine		9/16(56,25%)	13/16(81,25%)	7/16(43,75%)
Fentanyl		3/16(18,75%)	7/16(43,75%)	2/16(12,5%)
Emla	9/16(56,25%)	3/16(18,75%)	4/16(25%)	4/16(25%)
Capsacin		3/16(18,75%)	1/16(6,25%)	4/16(25%)
Others				
MEOPA	2/16(12,5%)	3/16(18,7%)	4/16(25%)	1/16(6,25%)
Cannabinoids	2/16(12,5%)	2/16(12,5%)	5/16(31,25%)	3/16(18,75%)

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When do you use metadone?

Raisons	number
Use of interdose	7/16(43,75%)
Need for high dose morphine	5/16(31,25%)
Neuropathic or visceral pain	3/16(18,75%)
Side effects of opiods	1/16(6,25%)
Opioid rotation	1/16(6,25%)

Are you worried about side effects?

Are you worried of the side effects of strong opioids?	Number
Yes versus No	**8/16(50%) versus 8/16(50%)**
Somnolence	***6/16(37,5%)***
Constipation	***6/16(37,5%)***
Nausea	3/16(18,75%)
Delirium	2/16(12,5%)
Coma	1/16(6,25%)
Falls	1/16(6,25%)

How do you manage pain in specific cases?

How do you manage pain in geriatric patients?	Number
Start with lower dose	9/16(56,25%)
Discussion with geriatrician	2/16(12,5%)
Avoid tramadol	2/16(12,5%)
Discuss with relatives	2/16(12,5%)
Discuss with GP	2/16(12,5%)
Start with paracetamol	1/16(6,25%)
How do you manage the lack of adherence?	
Explanation/education	14/16(87,5%)
Switch to another formula	3/16(18,75%)
oncocoach	1/16(6,25%)
Home team	1/16(6,25%)

How do you manage pain in specific cases?

What is your recommendation for inadequate analgesia?	Number
Ask advice pain clinic	***6/16(37,5%)***
Interventional therapy	***5/16(31,25%)***
Discuss combination	4/16(25%)
Opioid rotation	3/16(18,75%)
Antidepressants	1/16(6,25%)
What is your approach to deal with fear for addiction?	
Explanation	15/16(93,75%)
Start with low dose	3/16(18,75%)
Alternative	1/16(6,25%)

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What do you with pts with confusion etc….?

Referral to psychiatrist or neurologist	13/16(81,25%)
Oncogeriatric team	2/16(12,5%)
Support of family	1/16(6,25%)

How do you treat breakthrough pain?

Drugs	Number
Oxycodon instant	12/16
Tramadol	3/16
Morphine sc or IV	3/16
Buprenorfine SL	2/16
Steroids	1/16
Paracetamol	1/16
Intranasal fentanyl	1/16
CAM	1/16

ESMO recommendations for BTP

- Immediate release oral morphine is appropriate

- Intravenous opioids and sublingual/intranasal fentanyl have a shorter onset of analgesic effect

Metastatic spinal cord compression

What is your strategy?	Number
Advice neurosurgeon	16/16(100%)
Irradiation	16/16(100%)
Schedule?	
1*8 Gy or 5*4 Gy	7/16(43,75%)
Steroids	16/16(100%)

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Do you use Ra 223 or other radioisotope?

Ra 223 experience?	
For prostate cancer	7/16(43,75%)
It helps sometimes	6/16(37,5%)

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ESMO guidelines for MSCC

- The majority should receive RT
- Surgery only for selected pts

- Hypofractionation should be prefered

- Dexametasone should be prescribed for all pts

- Radioisotope can be evaluated in pts with osteoblastic disease only

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Pain caused by oral mucositis

What kind of therapy?	
Laser therapy	15/16(93,75%)
Oral solution	14/16(87,5%)
Tramadol	3/16(18,7%)
Parenteral drug	1/16(6,25%)
Methylen blue	1/16(6,25%)

Preventive measures for oral mucositis?

Do you use preventive measures? Yes	 14/16(87,5%)
Oral solution	11/16(68,75%)
Oral hygiene	6/16(37,5%)
Ice during chemotherapy	1/16(6,25%)
Cryotherapy	1/16(6,25%)
Growth factors	1/16(6,25%)
Topical therapy	1/16(6,25%)

Treatment of neuropathic pain(NP)

Do you consider opioids for neuropathic pain? Yes	14/16(87,5%)
Buprenorphine	6/16(37,5%)
Fentanyl	3/16(18,75%)
Oxycodon	3/16(18,75%)
Tapentadol	1/16(6,25%)
Tramadol	1/16(6,25%)
Metadone	1/16(6,25%)

Non-opioid treatment for NP

Non-opioid drug for the treatment of neuropathic pain	Number
Pregabalin	16/16(100%)
Gabapentin	15/16(93,75%)
Tricyclic antidepressants	15/16(93,75%)
Duloxetine	15/16(93,75%)
Venlafaxine	7/16(43,75%)

ESMO recommendations for NP

- NP should be treated by opioid and non-opioid drugs
- Pts should receive either a tricyclic antidepressant or an anticonvulsant
- Pts with NP due to bone metastases should be treated with RT in 5 fractions

Treatment of neuropathic pain

Do you consider interventional therapy? **Yes**	 **13/16(81,25%)**
Which type of interventional therapy?	
Infiltration	8/16(50%)
Nerve block	7/16(43,75%)
Cordotomy	2/16(12,5%)
Pulsed radiofrequency	2/16(12,5%)

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Invasive management of refractory pain?

Do you have access to epidural techniques?	
Yes	15/16(93,75%)
No	1/16(6,25%)
Do you have access to intraspinal techniques?	
Yes	13/16(81,25%)
No	3/16(18,75%)
What are the indications?	
Inadequate pain relief	7/16(43,75%)
Neuropathic pain	2/16(12,5%)
Side effects	1/16(6,25%)
Leptomingeal disease	1/16(6,25%)

Which invasive procedures are the most often used?

Is coeliac block available? **Yes**	**15/16(93,75%)**
Do you have experience with lobotomy?	
Yes versus No	*2/16(12,5%)* vs *12/16(75%)*
Do you have experience with cordotomy?	
Yes versus No	*5/16(31,25%)* vs *9/16(56,25%)*
Other neuro-surgical techniques	
Yes versus No	*6/16(37,5%)* vs *7/16(43,75%)*

Conclusions (1)

- There is a lack of dedicated structures for SC in Belgium
- There is a high need for research in cancer pain management
- ESMO guidelines are well followed

Conclusions (2)

- Small sample size
- Update of the survey is necessary