quality evidence). Olanzapine probably reduces delayed and vomiting. It is unclear if efficacy differs between 5 mg and 10 mg doses. We cannot exclude the possibility that 5 mg may be associated with a lower risk of somnolence and fatigue than 10 mg.

Conclusions There is moderate quality evidence that oral olanzapine increases freedom from nausea and vomiting in adults undergoing chemotherapy for solid tumours. There is uncertainty whether it increases serious adverse events. It may increase the likelihood of other adverse events and probably increases somnolence and fatigue. There is uncertainty about the relative benefits and harms of lower (5 mg) and higher (10 mg) doses.

144 EVALUATION OF EXISTING PRACTICE: DENOSUMAB FOR HYPERCALCAEMIA OF MALIGNANCY

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Background Hypercalcaemia of malignancy (HoM) is a burdensome problem affecting up to 44% of patients with advanced cancer. The standard of care is treatment with an intravenous bisphosphonate. Bisphosphonates are contraindicated in renal failure.

Denosumab is a monoclonal antibody that inhibits osteoclast differentiation and activity. Licensed for the prevention of skeletal related events in patients with bone metastases, Denosumab has been noted to cause hypocalcaemia in previously normocalcaemic patients. Denosumab is administered by subcutaneous injection and is safe in renal failure.

Ad hoc use of Denosumab for HoM has been observed in the palliative care setting.

We aimed to evaluate existing practice around the use of Denosumab for HoM by palliative medicine consultants in the North East of England.

Methods We constructed an online survey informed by a targeted literature review. The survey was disseminated electronically to all consultants in the North East regional palliative care physicians' group. An email reminder was sent after 7 weeks. The survey was closed after 8 weeks.

Results There were 28 respondents out of a possible 34. Eleven (39.3%) had used Denosumab for HoM. Of these, all used Denosumab for bisphosphonate refractory hypercalcaemia. There was some experience where bisphosphonates were contraindicated due to renal impairment. One patient was administered Denosumab at home. Four respondents used Denosumab in repeated doses for the same patient. Eight respondents reported that Denosumab successfully reduced serum calcium; three reported 'sometimes'. Doses varied between 60 mg and 120 mg.

All consulted with another specialty (oncology 90.9%) prior to using Denosumab.

There was high variability in the duration to re-test serum calcium. Two respondents encountered hypocalcaemia. There were no other adverse effects reported.

Conclusions Our results describe regional experience in the use of Denosumab. There was a wide variation in dosing and monitoring practices. The development of evidence-based guidance is strongly recommended.

145 WHAT OUTCOMES ARE IMPORTANT IN A DRUG TRIAL FOR CHRONIC BREATHLESSNESS AND ARE WE CAPTURING CHANGE?

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Background Chronic breathlessness is common, distressing and remains a challenging to assess and treat. New treatments are emerging, but must be evaluated using appropriate outcomes that reflect the concerns of people experiencing the symptom.

Aim To determine which outcomes are important to patients with chronic breathlessness, and the ability of outcome measurement tools to capture change during a drug treatment trial.

Methods Mixed-methods analysis of a multi-centre randomised double-blind feasibility trial of mirtazapine (ISRCTN registration 33236160). Quantitative outcome measures: numerical rating scale (NRS) for worst breathlessness in the last 24 hours, and chronic respiratory questionnaire (CRQ) were paired to in-depth qualitative data from interviews exploring outcomes of importance within the trial. Qualitative data was analysed thematically and quantitative data analysed according to the standard guidance for each questionnaire. The combined analyses were then triangulated, drawing upon a model of total breathlessness.

Results Paired data were available for 22 of 64 participants in the trial (data collected August 2016-December 2017). 16/22 (73%) were male; median (range) age 72 (57-85) years. Primary diagnoses were chronic obstructive pulmonary disease 10/22 (45%), interstitial lung disease 9/22 (41%), chronic heart failure 2/22 (9%) and lung cancer 1/22 (4%). Participants described outcomes of importance encompassing physical, social, emotional and spiritual domains. For many, perceived changes described during qualitative interview were consistent with changes in both NRS and CRQ scores. This was despite some participants expressing difficulties aligning an experience of breathlessness when completing scale for scale-based questionnaires.

Conclusions The main concerns described by participants in a drug trial for chronic breathlessness cross multiple health domains supporting a model of total breathlessness and the inclusion of multi-domain measures within trials. The agreement between paired qualitative and quantitative data indicates that both the NRS and CRQ outcome measures capture changes described by participants appropriately, and are suitable to use in definitive trials.

146 A CLUSTER RANDOMISED FEASIBILITY TRIAL (CRCT) TO TEST THE ROUTINE USE OF THE NEEDS ASSESSMENT TOOL: CANCER (NAT:C) IN PRIMARY CARE TO REDUCE UNMET PATIENT AND CARER NEEDS AND DETERMINE THE FEASIBILITY OF A DEFINITIVE TRIAL

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Background People with cancer commonly have distressing symptoms and unidentified palliative care needs. The Needs

Assessment Tool:Cancer (NAT:-C) is a validated tool to improve needs-based access to palliative care.

Aims To assess the feasibility and acceptability of conducting a definitive cRCT of the NAT:-C in primary care in terms of

1. Recruiting 4 GP practices and 40–60 patients (plus carers),
2. Uptake of NAT:-C,
3. Questionnaire completion rates,
4. Acceptability of study measures.

Methods A non-blinded cluster randomised trial with parallel process evaluation. Patients with active cancer were identified through cancer registries or in clinic and invited to participate and nominate a carer if they wanted to. Participants completed study questionnaires at baseline and 1, 3 and 6 months. Patients sought a 20 min appointment post-baseline. Patients, carers and GP practice staff were invited to participate in interviews/focus groups.

Results Five GP practices were approached and 4 recruited and trained in the use of the NAT:-C. Practices were cluster randomised (1:1). Forty-seven patients and 17 carers were recruited. Early recruitment problems were addressed by including a pre-paid expression of interest form with the study invitation. Recruitment rate was appropriate for a definitive multicentre trial. 44 (94%) of patients received a study appointment, 42 (95%) attended and 32 (76%) received a NAT-guided consultation. Item completion rates of the proposed primary outcome measure the Supportive Care Needs Survey at baseline were 96.4%. 15 patient interviews and 4 focus groups with GP practices were conducted. Participants supported the need for a definitive study and found all measures acceptable. Process evaluation informed effective refinement of study invitations.

Conclusion The feasibility trial indicated that the recruitment rate, intervention uptake and data collection were appropriate, with refinements, for a definitive cRCT is feasible.

147 WHAT ARE THE MAIN CONCERNS OF PARTICIPANTS IN A DRUG TRIAL FOR CHRONIC BREATHLESSNESS?

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10.1136/bmjspcare-2019-ASP.170

Background Chronic breathlessness is a common, distressing advanced illness symptom. Previous work has synthesised patient concerns, but not specifically within a trial setting.

Aims To determine the main concerns of participants in a drug trial for chronic breathlessness and assess change during the trial.

Methods Data was collected as part of a multi-centre randomised placebo controlled, double-blind feasibility trial of Mirzapine for patients with chronic breathlessness (ISRCTN 33236160). The question ‘What have been your main concerns or problems over the past 3 days?’ as part of the Integrated Palliative Outcomes Scale (IPOS) was asked at three time-points (baseline, day 14, day 28). Participants were able to provide up to three answers. A free text analysis was done, and concerns were categorised using the domains of total breathlessness. Results were compared across the time-points of the trial to assess for change.

Results 64 patients participated in the trial. 73% were male; median age 72 years (range 51–90). 63% had a diagnosis of chronic obstructive pulmonary disease, 30% interstitial lung disease, and 8% chronic heart failure or cancer. 267 responses were collected. The most commonly reported concerns were breathlessness (n=46 baseline, n=20 day 14, n=28 day 28), fatigue (n=7 baseline, n=6 day 14, n=6 day 28) and mobility (n=4 baseline, n=7 day 14, n=4 day 28). Using the model of total breathlessness, 81% of concerns were categorised within the physical domain. 23% as psychological, 6% spiritual, and 3% social. 35/267 concerns showed overlap across multiple domain.

Conclusion Physical concerns, specifically breathlessness, fatigue and mobility were most common. Concerns appeared to remain stable during the trial period. It is crucial that outcome measures which reflect the concerns of patients are selected.

148 ESTABLISHING RESEARCH PRIORITIES TO IMPROVE THE MANAGEMENT OF PATIENTS WITH ADVANCED HEART FAILURE FROM THE PEOPLE THAT MATTER

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Background Patients with advanced heart failure have a significant symptom burden and a range of palliative care needs but these are often unmet. Research priorities have traditionally been set by funders and researchers and focus on active treatment and palliative care research is not prioritised. Involving patients in the process can lead to more valid, credible and relevant research findings. This project sets out to establish shared research priorities for advanced heart failure from the patient, carer and clinician perspective, as a James Lind Alliance partnership.

Methods A steering group of people directly affected by advanced heart failure including patients, carers and clinicians is overseeing the project. The results of an initial online survey of priorities are presented here. A review of the literature will be carried out to identify where priorities have already been addressed, and where gaps exist. Submitted priorities will be sorted by a second online survey to generate a shorter list for discussion at a final workshop in early 2019, where a ‘Top Ten’ will be agreed. The ‘Top Ten’ will be disseminated widely to researchers and funders to influence the advanced heart failure research agenda.

Results Preliminary results of the online survey of 180 participants has demonstrated palliative research questions are a priority for this group. Themes include planning for the future, coordination of care, communication and supporting family members and carers. Comorbidity was recognised as common. Symptom control was also prioritised, including symptoms under-recognised by clinicians such as fatigue, and psychological issues like depression, loneliness and poor cognition.

Conclusion Preliminary results indicate new insight into what matters to people and what they would like to see researched. The palliative care research community should be ready to take up the challenge of exploring these unanswered questions.

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