



HAL
open science

Return to work trajectories after early breast cancer diagnosis: A population-based cohort study in the French National Healthcare Insurance database.

R Varnier, A Moskal, A Dima, C Bodelet, J Péron, M Lamort-Bouché, Jb Fassier, M Viprey

► To cite this version:

R Varnier, A Moskal, A Dima, C Bodelet, J Péron, et al.. Return to work trajectories after early breast cancer diagnosis: A population-based cohort study in the French National Healthcare Insurance database.. ESMO Congresss, Sep 2022, Paris, France. 33, pp.S1281 - S1282, 2022, 10.1016/j.annonc.2022.07.1921 . hal-04337450

HAL Id: hal-04337450

<https://hal.science/hal-04337450>

Submitted on 12 Dec 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

explore the possible associations between these parameters and clinical outcomes in non-small-cell lung cancer (NSCLC) pts receiving first-line Pembrolizumab monotherapy.

Methods: A retrospective review of consecutive advanced NSCLC pts treated with Pembrolizumab as first-line therapy at two academic medical institutions from August 2017 to October 2021 was performed. The estimation of skeletal muscle and adipose tissue were performed using pre-treatment computed tomography scans at the level of the third lumbar vertebra, obtaining Skeletal Muscle Area (SMA), Intermuscular Adipose Tissue (IMAT), Subcutaneous Adipose Tissue (SAT), and Visceral Adipose Tissue (VAT). Data were correlated to progression-free/overall survival (PFS/OS) using a Cox and logistic regression model. Log-Rank analysis was used for Kaplan-Meier curves comparison.

Results: Data from 102 pts (median age: 68 years [range 36-85]; median follow-up: 12 months [range 1-131]) were collected. Overall, 52% and 58.8% of pts met established radiographic criteria for evidence of sarcopenia and myosteatosis, respectively, which occur across the BMI spectrum. Median OS was 17.2 months; higher SAT (HR 1.01, 95% CI 1.00-1.02; $p=0.017$) and higher VAT/SMA ratio (HR 1.48, 95% CI 1.07-2.05; $p=0.016$) were significantly associated to OS. A ROC curve was constructed to obtain a VAT/SMA ratio cut-off for OS.

Conclusions: Our findings showed that pre-treatment skeletal muscle wasting was often reported in NSCLC patients undergoing Pembrolizumab, across all BMI categories. Besides, our preliminary results support the hypothesis that BC may affect these patients' survival, suggesting a potential interaction between BC and the immune system. Further analyses are ongoing in this patients' cohort, to augment knowledge in this field combining biological and clinical features with analytic and preclinical studies.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

<https://doi.org/10.1016/j.annonc.2022.07.1921>

1619P Assessment of the pharmacokinetic interaction of enzalutamide with oxycodone in men with prostate cancer: The ENZYME study

S.E.H. Detert Oude Weme¹, W.L. Vervenne², A.L.T. Imholz², R.G.H.M. Cremers³, I.R.F. van Berlo-van de Laar¹, F.G.A. Jansman¹, G.E. Benoist¹

¹Department of Clinical Pharmacy, Deventer Ziekenhuis, Deventer, Netherlands;

²Department of Medical Oncology, Deventer Ziekenhuis, Deventer, Netherlands;

³Department of Urology, Deventer Ziekenhuis, Deventer, Netherlands

Background: Up to 90% of patients with castration-resistant prostate cancer (CRPC) will develop symptomatic metastases requiring pain medication. Oxycodone is an opioid metabolized primarily by cytochrome P450 (CYP) 3A4 to the inactive metabolite noroxycodone and by CYP2D6 to the active metabolite oxymorphone. Both are further metabolized to noroxymorphone by CYP3A4 and 2D6. Enzalutamide (ENZ) is a widely used androgen receptor antagonist for the treatment of CRPC and a strong inducer of CYP3A4. Due to this CYP3A4 induction, it is expected that ENZ will reduce the analgesic effects of oxycodone. This is the first study investigating the effect of ENZ on the pharmacokinetics of oxycodone.

Methods: We performed a prospective, two-arm parallel study in men with prostate cancer. Patients in arm 1 were treated with ENZ 160 mg once daily for at least 40 days; patients in control arm 2 were not treated with ENZ. All patients received a single oral dose of 15 mg normal-release oxycodone, followed by blood sampling up to 8 hours after dosing. Plasma concentrations of oxycodone, noroxycodone, oxymorphone and noroxymorphone were quantified using a validated LC-MS/MS method. The difference in geometric mean of the maximum plasma concentration (C_{max}) and area under the curve (AUC_{0-8h}) between the arms was determined.

Results: In total 27 patients were included, of who one subject was excluded since he was a CYP2D6 poor metabolizer. In the ENZ arm ($n=13$), mean AUC_{0-8h} and C_{max} of oxycodone were resp. 44.7% ($p<.001$) and 35.5% ($p=.004$) lower compared to the control arm ($n=13$). ENZ decreased AUC_{0-8h} and C_{max} of the active metabolite oxymorphone with resp. 74.2% ($p<.001$) and 56.0% ($p=.001$). In contrast, ENZ increased AUC_{0-8h} and C_{max} of the CYP3A4-dependent inactive metabolite noroxycodone with resp. 61.2% ($p=.001$) and 78.2% ($p=.001$) and of the inactive metabolite noroxymorphone with resp. 45.0% ($p=.032$) and 59.8% ($p=.027$).

Conclusions: ENZ decreases exposure to oxycodone and its active metabolite oxymorphone. This interaction is clinically relevant because pain may not be adequately controlled and there is a risk of overdose upon ENZ discontinuation. A switch to an opioid that is not metabolized by CYP3A4, e.g. morphine, may be necessary to achieve adequate and safe pain management during treatment with ENZ.

Clinical trial identification: NL75669.075.20.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

<https://doi.org/10.1016/j.annonc.2022.07.1922>

1620P Return to work trajectories after early breast cancer diagnosis: A population-based cohort study in the French National Healthcare Insurance database

R. Varnier¹, A. Moskal¹, A.L. Dima¹, C. Bodelet¹, J. Peron², M. Lamort-Bouché¹, J.-B. Fassier³, M. Viprey⁴

¹Research on Healthcare Performance (RESHAPE, Inserm U1290), Université Claude Bernard Lyon 1, Lyon, France; ²Biometry and Evolutionary Biology Laboratory, Health and Biostatistics Team (UMR UCBL/CNRS 5538), Université Claude Bernard Lyon 1, Lyon, France; ³Unité Mixte de Recherche Épidémiologique et de Surveillance Transport Travail Environnement (UMRESTTE, UMR T9405), Université Claude Bernard Lyon 1, Lyon, France

Background: Return to work (RtW) is important for quality of life after breast cancer (BC), and a difficult challenge for many patients (pts). Current evidence relies mainly on selected populations and limited indicators. We aimed to construct RtW indicators based on sickness leave (SL) and disability pension (DP) benefits, and to explore RtW trajectories.

Methods: We conducted a retrospective cohort study using data from a random sample of 1/97th beneficiaries of the French National Health System. All women aged 25-55 years with a first early BC diagnosis between 2013 and 2016 were included and followed-up for 3 years. We constructed RtW indicators based on literature review, data availability and stakeholders' expertise in the national context. Descriptive analyses were performed on sample characteristics and RtW indicators. Longitudinal RtW trajectories were explored using sequence analysis and clustered using optimal matching.

Results: Data from 306 pts (56% HR+/HER2-, 24% triple-negative, 14% HER2+, 6% in situ) were extracted. (Neo)adjuvant chemotherapy, trastuzumab and endocrine therapy were administered in 59%, 14% and 66% of pts, respectively. Median time with compensation until full and sustainable (> 28 days) RtW was 242 days. Median cumulative lengths of all-type and full-time sickness absence during follow-up were 450 days and 313 days, respectively. Full-time or partial RtW was achieved by 57% of pts at 1-year, 82% at 2-year and 85% at 3-year after diagnosis. Three RtW trajectories were identified: "RtW within a year" (48% of the population) with pts experiencing RtW during the 1st year and limited subsequent work interruption, "RtW supported by partial SL or DP" (38%) with pts typically returning to work during the 2nd year after a partial SL period or with a partial DP, and "continued compensation" (14%) with pts receiving either complete SL benefit or DP at 3-year.

Conclusions: Identification of RtW trajectories based on French medico-administrative databases seems feasible. It revealed large individual variability and identified three distinct groups of RtW trajectories. Further exploration of trajectory determinants and lived experience is needed to develop targeted RtW interventions.

Legal entity responsible for the study: INSERM U1290 « Research on Healthcare Performance » (RESHAPE).

Funding: Cancéropôle CLARA.

Disclosure: J. Peron: Financial Interests, Personal, Invited Speaker: Eisai; Financial Interests, Personal, Advisory Board: Eisai; Financial Interests, Personal, Member of the Board of Directors: Fab'entech; Financial Interests, Institutional, Funding: Roche, AstraZeneca. J. Fassier: Financial Interests, Institutional, Advisory Role: Chugai. All other authors have declared no conflicts of interest.

<https://doi.org/10.1016/j.annonc.2022.07.1923>

1621P miRNA signature as early predictor of hyponatremia and survival in lung cancer: Preliminary results from the ISA retrospective study

G. Mentrasti¹, E. Ambrosini², L. Giuliani¹, N. Chiodi², C. Liguori¹, M. Gualtieri¹, F. Bianchi², F. Barbian³, G. Goteri³, M.B.L. Rocchi⁴, R. Berardi¹

¹Department of Medical Oncology, Università Politecnica delle Marche, AOU Ospedali Riuniti di Ancona, Torrette di Ancona, Italy; ²Molecular and Clinical Science Department, Università Politecnica delle Marche, Ancona, Italy; ³Department of Biomedical Sciences and Public Health, Section of Anatomical Pathology, Università Politecnica delle Marche, Ancona, Italy; ⁴Department of Biomolecular Sciences, Biostatistics Unit, Università degli Studi di Urbino, Urbino, Italy

Background: Syndrome of inappropriate antidiuresis (SIAD) in cancer is the main cause of hyponatremia and is associated with poorer survival, hospitalization and health costs in lung cancer (LC) patients (pts). Micro-RNAs (miRNAs) represent promising biomarkers with therapeutic potential. Our retrospective study aims to