CML AdvocatesNetwork

EUROPEAN HEMATOLOGY ASSOCIATION
23RD CONGRESS

FRIDAY, JUNE 15, 17:30 - 19:00
CLINICAL. POSTERS. POSTER AREA.

Abstract: PF368

LONG-TERM TREATMENT-FREE REMISSION (TFR) IN PATIENTS (PTS) WITH CHRONIC MYELOID LEUKEMIA IN CHRONIC PHASE (CML-CP) FOLLOWING FRONTLINE (1L) NILOTINIB (NIL): RESULTS FROM ENESTFREEDOM
Prof. Giuseppe Saglio

Aims
In ENESTfreedom, TFR rates of 51.6% at 48 wk and 48.9% at 96 wk have been reported; here we present a long-term (144-wk) analysis of the durability and safety of TFR.

Conclusion
These results support the long-term durability and safety of TFR following 1L NIL, with no disease progressions or deaths attributable to CML. Together with ENESTnd data showing higher sustained DMR rates with 1L NIL vs IM, these findings suggest more pts may be able to attempt and achieve TFR with 1L NIL.

Abstract: PF373

DIGITAL PCR IN PH+ CHRONIC MYELOID LEUKEMIA PATIENTS FOR RECOGNITION OF "STABLE" DEEP MOLECULAR RESPONSE AND IDENTIFICATION OF BEST CANDIDATES TO TKI DISCONTINUATION
Dr. Michele Malagola

Aims
This study aims to comparatively monitor the DMR of CML patients treated with TKIs by qPCR and dPCR to evaluate the suitability and reliability of the dPCR for an improved recognition of "stable" DMR and for a better selection of the best candidates for TFR.

Conclusion
The results suggest that dPCR would be more accurate than qPCR in order to recognize the CML patients with stable DMR and the best candidates for TKI discontinuation.

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Abstract: PF369

BOSUTINIB VERSUS IMATINIB FOR NEWLY DIAGNOSED CHRONIC MYELOID LEUKEMIA IN THE BFORE TRIAL: 24-MONTH FOLLOW-UP
Carlo Gambacorti-Passerini

Aims
Here we compare efficacy of first-line bosutinib and imatinib after ≥24 months (median: 27 months) of follow-up.

Conclusion
At 24 months, a higher MMR rate was maintained with bosutinib vs imatinib, confirming the superior efficacy of bosutinib. The results continue to support the use of bosutinib as first-line therapy for CP CML.

Abstract: PF370

PREVALENCE AND OUTCOMES OF UNCOMMON BCR-ABL FUSION TRANSCRIPTS IN PATIENTS WITH CHRONIC MYELOID LEUKEMIA: DATA FROM A SINGLE CENTER
Dr. Ya-Zhen Qin

Aims
To explore the types, prevalence and outcomes in CML patients with uncommon BCR-ABL transcripts receiving TKI therapy.

Conclusion
Uncommon BCR-ABL fusion transcripts are rare and diverse in patients with CML and may be relevant for TKI therapy outcomes. Our data suggested that the identification uncommon BCR-ABL transcripts is essential at presentation to aid in diagnosing, appropriate monitoring and guiding treatment choices for patients with CML.

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Abstract: PF371

UPDATED RESULTS FROM THE ONGOING PHASE I STUDY OF PF-114 MESYLATE IN PATIENTS WITH CML WITH FAILURE OF PRIOR TKI THERAPY

Anna Turkina

Aims

The primary objective of the current Phase I is to study the dose-limiting toxicities (DLTs) occurring in 1-st 28-day cycle of treatment and determine the maximum tolerated dose (MTD). Secondary objectives include safety, pharmacokinetics, anti-CML activity (based on hematologic, cytogenetic, and molecular assessments).

Conclusion

PF-114 exhibits antitumor activity in heavily pretreated patients with resistant forms of CML. The evaluation of the safety profile and efficacy continues. The dose escalation stage of the trial continues, while the enrollment of patients into expanded cohorts at doses below MTD has already started

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Abstract: PF372

VARIATION IN LIMIT OF BLANK FOR BCR-ABL1 DETECTION BETWEEN LABORATORIES IMPACTS ON SCORING OF DEEP MOLECULAR RESPONSE

Dr. Helen White

Aims

The aim of the project was to determine the LoB for *BCR-ABL1* RT-qPCR assays carried out in experienced EUTOS laboratories (n=12). The LoB is defined as the highest measurement result that is likely to be observed for a negative sample *i.e.* the likelihood of reporting a false positive *BCR-ABL1* result at a defined probability (α).

Conclusion

Defining the LoB (and LoD) of quantitative assays is important for assay validation and is necessary for accreditation of a diagnostic test to ISO 15189 (2012). This study provides a practical recommended protocol for determining the LoB for *BCR-ABL1* RT-qPCR assays. A major challenge of the study was the production of *BCR-ABL1* negative samples. Initially material was prepared from several '*BCR-ABL1* negative' human cell lines from independent sources but these showed very low level but reproducible amplification of *BCR-ABL1*.

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Abstract: PF374

FIRST INTERIM ANALYSIS OF THE RUSSIAN MULTICENTER PROSPECTIVE STUDY RU-SKI: DISCONTINUATION OF TYROSINE KINASE INHIBITORS IN PATIENTS WITH CHRONIC MYELOID LEUKEMIA AND DEEP MOLECULAR RESPONSE
Ekaterina Chelysheva

Aims
To describe the CML pts enrollment into prospective study of TKI discontinuation in Russia and to evaluate the first results of survival without loss of major molecular response (MMR).

Conclusion
The enrollment of CML pts with DMR into the first prospective trial evaluating the TFR approach in Russia was successful though a significant proportion of trial candidates was declined. The preliminary analysis of survival without MMR loss showed the results comparable to large international trials in a cohort of pts which was heterogeneous in terms of duration and lines of TKI therapy, icluding pts with previous resistance to imatinib. The results will be updated within a longer follow-up.

Abstract: PF375

RESULTS OF TREATMENT OF PATIENTS WITH CHRONIC MYELOID LEUKEMIA AND PREGNANCY IN ACCORDANCE WITH THE LEUKEMIC BURDEN AND TERM OF PREGNANCY (THE LET SCHEME)
Dr. Ekaterina Chelysheva

Aims
To evaluate the results of treatment scheme in CML pts with pregnancy considering the Leukemic burden and Term of pregnancy (LET).

Conclusion
The LET scheme which considers a pregnancy stage and a leukemic burden may support a successful childbirth in different clinical situations for CML pts. Further analysis of treatment schemes at pregnancy may help to find a balance of risks both mother and baby.

FRIDAY, JUNE 15, 17:30 - 19:00
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Abstract: PF376

ALLOGENEIC STEM CELL TRANSPLANTATION FOR CHRONIC MYELOID LEUKEMIA IN THE TKI ERA: POPULATION BASED DATA FROM THE SWEDISH CML REGISTRY.
Anna Lübking

Aims
We aimed to evaluate patients undergoing allo-HSCT regarding indication, phase of disease at transplantation and outcome in a population-based manner. Furthermore, data concerning relapse rate and management of relapse in different patient groups as well as post-transplant TKI treatment were analyzed.

Conclusion
Our population-based study demonstrates that there is still a considerable number of patients with CML in CP undergoing allo-HSCT each year. Patients transplanted in CP1 have an excellent OS, low NRM and respond to TKI and/or DLI treatment in case of relapse. We found a relatively low NRM even for patients transplanted in AP/BC but a high number of relapses, underlying the dismal OS in this group.

Abstract: PF377

LONG-TERM TREATMENT-FREE REMISSION (TFR) FOLLOWING SECOND-LINE (2L) NILOTINIB (NIL) IN PATIENTS (PTS) WITH CHRONIC MYELOID LEUKEMIA IN CHRONIC PHASE (CML-CP): ENESTOP 144-WK RESULTS
Timothy Hughes

Aims
Assess long-term TFR durability and safety at 144 wk after stopping 2L NIL.

Conclusion
These results show that following 2L nilotinib, long-term durable TFR is achievable in many pts, and pts should be monitored for potential late loss of response. Most pts restarting NIL regained stable $MR^{4.5}$.

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Abstract: PF378

NILOTINIB VERSUS NILOTINIB COMBINED TO PEGYLATED-INTERFERON ALFA 2A IN FIRST-LINE CHRONIC PHASE CML PATIENTS. UPDATED INTERIM ANALYSIS OF A PHASE III TRIAL
Franck Nicolini

Aims
Comparison of DMR rates of NIL+Peg-IFN *vs* NIL alone, prospectively, in newly diagnosed CP-CML. (EudraCT 2013-004974-82).

Conclusion
The combination of NIL+Peg-IFN provides significantly higher rates of DMR rates by M12, in newly diagnosed CP CML pts without increasing the rate of early SAEs in such setting. M30 updated results will be presented during the meeting.

Abstract: PF379

THE VALUE OF BCR-ABL1 QPCR LEVEL AND DOUBLING TIME (DT) TO PREDICT SUCCESSFUL TREATMENT-FREE REMISSION AFTER IMATINIB DISCONTINUATION: TREATMENT-FREE REMISSION ACCOMPLISHED BY DASATINIB (TRAD) TRIAL
Prof. Dennis Kim

Aims
One aim of our trial is to identify early surrogates that predict successful TFR by using serial measures of BCR-ABL1 qPCR and doubling time (DT).

Conclusion
BCR-ABL1 qPCR level at 2 months was very predictive of TFR success with a molecular cutoff of 5.0 logs.

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Abstract: PS1118

PATIENT-SPECIFIC BCR-ABL1 GENOMIC FUSION ANALYSIS OF MINIMAL RESIDUAL DISEASE OF CML PATIENTS ELIGIBLE FOR TKI STOPPING SIGNIFICANTLY OUTPERFORMED MRNA DETECTION EITHER BY QPCR OR DIGITAL PCR

Dr. Katerina Machova Polakova

Aims

To assess differences of MRD detection of BCR-ABL1 by 4 approaches in CML patients who responded to TKI treatment with sustained DMR.

Conclusion

BCR-ABL1 DNA-based approaches were more precise and sensitive than mRNA analyses in significant number of patient samples of peripheral blood. Whether this difference will be reflected also in better outcome prediction within TKI stopping protocols remains to be addressed in subsequent long-term analysis.

Support AZV 15-31540A and 16-30186A, EUTOS 2016, MZCR 00023736

Abstract: PS1119

TREATMENT-FREE REMISSION AFTER SECOND-STOP OF IMATINIB THERAPY IN PATIENTS WITH CHRONIC MYELOID LEUKEMIA IN CHRONIC PHASE

Prof. Dr. Sukjoong Oh

Aims

We analyzed data from patients who regained durable deep molecular response after IM resumption for relapse and stopped IM therapy again in the Korean multicenter prospective study (Korean Imatinib Discontinuation Study; KID Study).

Conclusion

Our data demonstrated that a second attempt might be possible and the median time to MMR loss after second discontinuation was similar to those of the first discontinuation. But the molecular kinetics after second IM resumption needs longer follow-up with more patients. Further studies on the predictors to select patients for a trial of second TFR and novel strategies such as intermittent therapy will be warranted.

Abstract: PS1120

TWO YEARS OF THERAPY WITH MATINIB GENERICS IN CHRONIC MYELOID LEUKEMIA; A REPORT FROM THE POLISH ADULT LEUKEMIA GROUP (PALG) IMATINIB GENERICS REGISTRY.
Assoc. Prof. Tomasz

Aims
To evaluate the efficacy and safety of imatinib generics in the same cohort of patients after two years of therapy.

Conclusion
This report on “real life” the effectiveness and safety of imatinib generics in a big cohort of CML patients after two years of observation suggests that they seem to be not less effective as Glivec in treating patients with CML CP; the responses being stable and safety profile is acceptable, without any increased switching rate between the 1st and 2GTKI during the first and second year of observation.

Abstract: PS1121

MAINTENANCE THERAPY WITH DASATINIB ADMINISTRATED EVERY OTHER DAY IN PATIENTS WITH CHRONIC MYELOID LEUKEMIA
Clemence Loiseau

Aims
We first conducted a retrospective analysis on real-life CML pts allocated to maintenance therapy and then proposed a prospective maintenance study as part of the OPTIM dasatinib trial (EudraCT 2008-006854-17). The primary objective was to assess survival in maintenance without loss of MMR (BCR-ABL^{IS}>0.1%).

Conclusion
A maintenance therapy with dasatinib once every 48 hours after achievement of a deep molecular response is feasible. Pts with duration of TKIs≥3y and duration of MR4≥1y experienced very high rates of survival in maintenance without loss of MMR (>95%) and without dasatinib related toxicities. Our results suggest that maintenance with dasatinib is an attractive option for pts in sustained deep molecular response.

Abstract: PS1122

PONATINIB 15 MG DAILY, COMBINING EFFICACY AND TOLERABILITY. A RETROSPECTIVE SURVEY IN ITALY.

Dr. Gianni Binotto

Aims

Describe and assess the efficacy and toxicity of low doses of ponatinib in CML-CP resistant or intolerant to previous TKIs.

Conclusion

This analysis confirms the efficacy of de-escalated ponatinib dose in CML patients resistant to prior TKIs, with acceptable toxicity profile. Promising data on 15 mg as a starting dose in selected patients (intolerant or with low level resistance) warrant further investigation in larger prospective trials.

Abstract: PS1123

THE EUTOS LONG-TERM SURVIVAL SCORE PREDICTS RESPONSE AND SURVIVAL OF ELDERLY CHRONIC MYELOID LEUKEMIA PATIENTS BETTER THAN SOKAL SCORE

Dr. Fausto CASTAGNETTI

Aims

To compare the prognostic value of ELTS and Sokal scores in a cohort of CML patients treated in early chronic phase with tyrosine kinase inhibitors (TKIs) as first-line therapy. Given the different weight that the variable “age” has in the two score formulations, we hypothesized a different predictive value in specific age groups, so we compared the ELTS and Sokal scores in patients < 30 years, 30-64 years and > 65 years old.

Conclusion

The risk distribution according to the ELTS and Sokal score and the concordance between the 2 scores was different in specific age groups (< 30, 30-64, > 65 years old). In elderly CML patients treated with IM or NIL as frontline therapy the prognostic predictive ability of ELTS score resulted superior to the Sokal score.

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Abstract: PS1124

CARDIOVASCULAR TOXICITY IN CHRONIC MYELOID LEUKEMIA PATIENTS TREATED WITH SECOND-GENERATION TYROSINE KINASE INHIBITORS IN REAL-LIFE PRACTICE. IDENTIFICATION OF RISK FACTORS AND ROLE OF PROPHYLAXIS.

Dr. Giovanni Caocci

Aims

We therefore analyzed a large real-life cohort of Italian CML patients treated with a 2^{ndG}TKIs as first or subsequent line of treatment. The primary objective was to evaluate the incidence of CV-AE and the association with the Systematic Coronary Risk Evaluation (SCORE) assessment and other baseline risk factors. Secondary objective were to evaluate the role of primary or secondary prophylaxis in preventing CV atherothrombotic events and to report the management of CV-AE complications in the clinical practice.

Conclusion

This study confirmed the increased risk of CV-AE in CML patients treated with 2^{ndG}TKIs in the real-life, particularly in those patients with positive anamnesis for CVD and 2^{ndG}TKI line of treatment >1. Our findings emphasize the need of personalized prevention strategies based on CV risk factors; ideally, management and treatment of these patients should be performed in close collaboration with cardio-oncologists, angiologists and vascular surgeons. We suggest that patients with age >60 years and CV diseases undergoing a 2^{ndG}TKI line treatment >1 are likely to be the best candidates to aspirin. Data on efficacy of primary prophylaxis in CV-CML high risk patients should be confirmed in prospective randomised trials.

Abstract: PS1125

ULTRA-SENSITIVE DETECTION OF TYROSINE KINASE INHIBITOR RESISTANT MUTATIONS IN CHRONIC MYELOID LEUKEMIA PATIENTS USING MISEQ ILLUMINA NEXT GENERATION SEQUENCING PLATFORM

Marianna Romžová

Aims

Our aim was to develop a simple and efficient Illumina-based one-round PCR amplification protocol, which would reduce PCR-mediated errors and increase sensitivity of KD mutation detection ≤1%, with still acceptable specificity.

Conclusion

Overall, we have confirmed that results from NGS analysis, using Illumina-based one-round PCR amplification protocol, highly correlated with SS when mutations with >20% VAF were analyzed. Due to high sensitivity (together with high specificity) Illumina-based NGS analysis was able to detect mutations in 24% more samples than SS and proved to be suitable for earlier detection of TKI resistant mutations at very low frequencies (≥0.1 %).

Abstract: PS1126

PEG-INTERFERON ALPHA 2B CAN IMPROVE MOLECULAR RECURRENCES IN THE TREATMENT-FREE REMISSION; A PILOT STUDY WITH 18-MONTH FOLLOW-UP

Manuel Ayala

Aims

Decrease molecular recurrence (MolRel) rate in patients with CML-CP in stable uRM with TKI suspension and maintenance for 6 months with P-IFNα2b.

Conclusion

Although these results are preliminary (since a sample of 50 patients is expected to be included), the trend suggests that P-IFNα2b may be useful as maintenance after TKI suspension to decrease the rate of molecular relapse at 6 months of the suspension of the TKI. It is expected to determine the involvement of the immunological behavior of lymphocyte subpopulations in the maintenance of uMR, using P-IFNα2b after TKI suspension, which will be reported later to complete the year of TKI suspension. To our knowledge this is the first prospective study in Latin America that reports this therapeutic strategy of TFR.

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CLINICAL. POSTERS. POSTER AREA.

Abstract: PS1127

CROSS-INTOLERANCE WITH BOSUTINIB AFTER PRIOR TYROSINE KINASE INHIBITORS IN PATIENTS WITH PHILADELPHIA CHROMOSOME–POSITIVE LEUKEMIA: PHASE 1/2 STUDY UPDATE

Jorge Cortes

Aims

Cross-intolerance between bosutinib and prior TKI therapy was evaluated after ≥4 years of follow-up of a phase 1/2 study (NCT00261846).

Conclusion

Cross-intolerance with bosutinib was low and largely due to hematologic AEs, supporting bosutinib use in patients with Ph+ leukemia intolerant to prior TKIs, including those with intolerance due to rash or diarrhea.

Abstract: PS1128

CHRONIC MYELOID LEUKEMIA ITALIAN MULTICENTER OBSERVATIONAL STUDY (CML-IT-MOS): ANALYSIS OF CLINICAL CHARACTERISTICS OF 1330 CML PATIENTS TREATED IN REAL-LIFE IN 66 ITALIAN CENTERS OF THE GIMEMA GROUP

Giorgina SPECCHIA

Aims

To provide a robust and updated information on the clinical, hematologic characteristics and treatment response in non-selected Italian patients with chronic myeloid leukemia (CML) in each phase of the disease.

Conclusion

Our preliminary results of this observational epidemiologic study suggest that collection of clinical data of CML patients treated out of strictly clinical trials represent an essential tool for long/term treatment, able to observe setting strategies based on the clinical characteristics, the degree of response obtained and the toxicity related to the therapy in overall CML population. We are planning to analyze all these tools in order to observe the response according to ELN guidelines, toxicity and feasibility of treatment sequence in a cohort of patients treated in real-life. In conclusion, is needful to continue recruiting patients due to obtain a greater representativeness

Abstract: PS1129

IMATINIB STOP STUDY FEASIBLE TO JAPANESE CLINICAL SETTING.
Dr. Kensuke Usuki

Aims

we conducted a multicenter phase ii trial to test the safety and efficacy of discontinuing imatinib after at least 2 years of mr4.0-equivalent (umin clinical trials registry umin000012472).

Conclusion

This phase 2 study was contrived to be feasible in japanese clinical setting. The outcome is comparable to other tfr studies.

Abstract: PS1130

THE TARGET UK STUDY: AN EVALUATION OF TYROSINE KINASE INHIBITOR RESPONSE MONITORING PATTERNS AND REAL-WORLD MOLECULAR RESPONSE RATES IN UK PATIENTS WITH CHRONIC MYELOID LEUKAEMIA
Adam Mead

Aims

This study aims to evaluate TKI pathways, monitoring patterns and real-world response rates in UK patients with CML against ELN2013 to inform future clinical practice.

Conclusion

Findings in this real-world UK cohort suggest a higher proportion of Pts treated with 2G TKI (1L or 2L) achieve optimal ELN responses than with imatinib. The observed proportion achieving an optimal response was greater in Pts who switched TKI following an ELN “failure” response than those who remained on 1L therapy, supporting the use of ELN2013 recommendations to guide TKI management. Results also highlight MMR and DMR can be achieved in real world practice even in Pts switching TKI following an ELN failure, warning, or documented resistance. However, the findings also demonstrate ELN2013 recommendations are not universally implemented in UK practice; the timing of PCR monitoring, the performance of mutational analysis, and management of Pts with an ELN warning/failure response frequently deviated from ELN recommendations highlighting areas for improvement for optimal patient management in the UK. Further follow-up is planned to investigate longer-term outcomes in this real-world cohort.