ASH Annual Meeting

-Author name in bold denotes the presenting author
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denotes an abstract that is clinically relevant.

denotes that this is a recommended PHD Trainee Session.

denotes that this is a ticketed session.

1374 Hematological Cancer Consortium: Multi-Center Acute Lymphoblastic Leukemia Registry Data from India

Program: Oral and Poster Abstracts
Session: 612. Acute Lymphoblastic Leukemia: Clinical Studies: Poster I
Hematology Disease Topics & Pathways:
Adult, Leukemia, ALL, Diseases, Therapies, Non-Biological, chemotherapy, Pediatric, Study Population, Lymphoid Malignancies, Clinically relevant, Quality Improvement

Saturday, December 1, 2018, 6:15 PM-8:15 PM
Hall GH (San Diego Convention Center)

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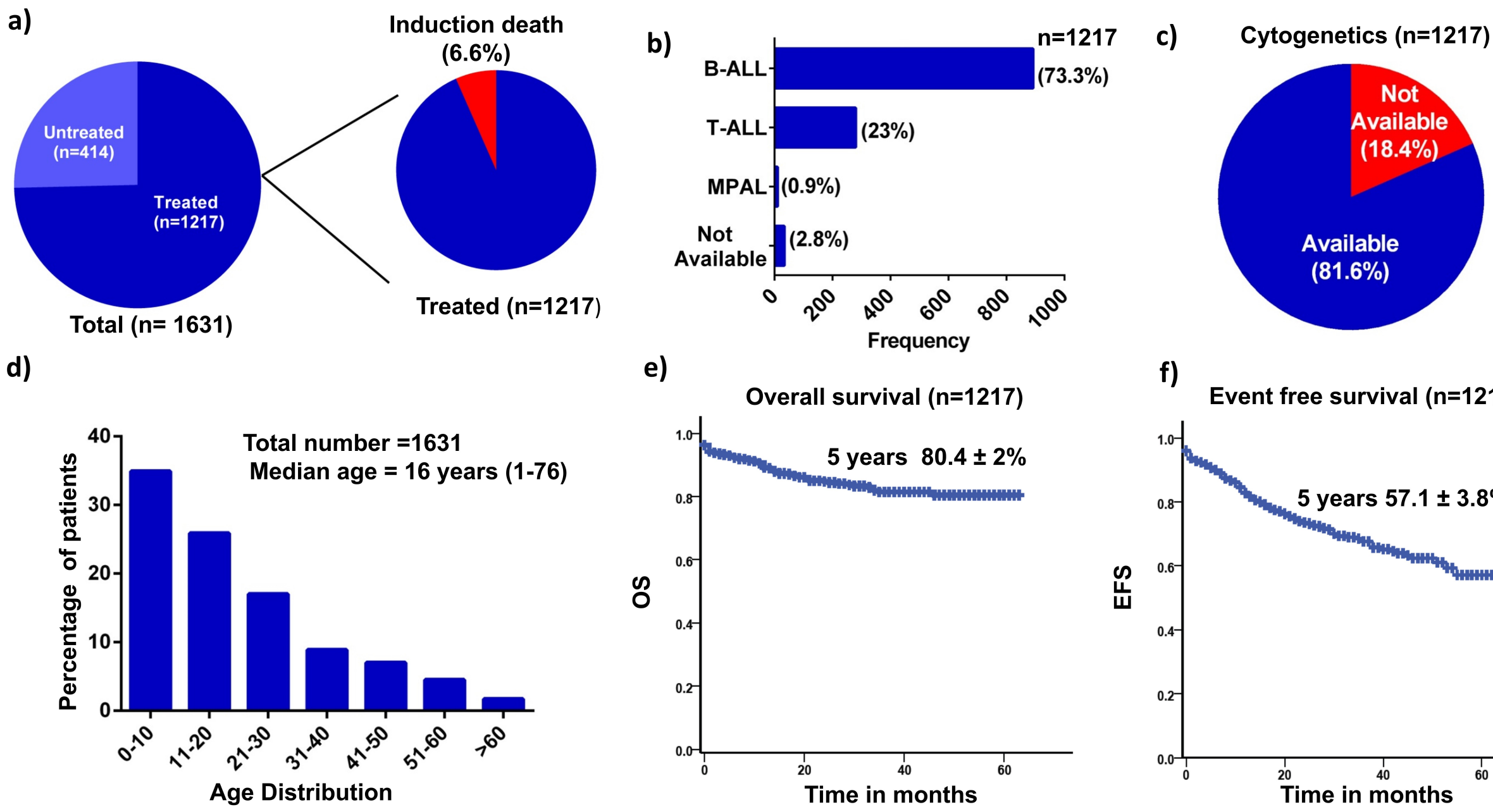
Significant strides have been made in the management of ALL and clinical outcomes have steadily improved over the last few decades. Many of these advances involve intensification of therapy, allogeneic SCT, improved molecular risk stratification and measurable residual disease (MRD) directed therapy. However in the developing world and low middle income countries (LMIC) there are significant challenges in implementing or access to such advances. Additionally, in the absence of large collaborative research groups in LMIC, as has been developed in most developed economies, it is difficult to get a handle of the magnitude of the problem and develop strategies to overcome them. The ‘Hematological Cancer Consortium’ is a collaborative group from India currently comprisingof twelve institutions spread across the country that have come together to collaborate in the field of leukemia. As an initial exercise to establish denominators a retrospective data analysis was undertaken (Indian acute leukemia research database [INwARD]). Here we present the retrospective analysis of the acute lymphoblastic leukemia (ALL) data.

Retrospective data from January 2013 to December 2017 was collected from 7 large tertiary centers from across the country. A central online data capture and management system was in place which was independent of all the participating centers (Clinical Data Management Center [CDMC], Vellore, which is compliant with standard ICH-GCP regulations). In this initial phase some centers contributed data offline to the data management center. A total of 1631 patients were confirmed to have had a diagnosis of ALL in this period of which it was noted that 1217 (75%) received definitive treatment (Fig 1 a). The majority of treated cases were B ALL (73%) followed by T ALL (23%), MPAL was diagnosed in 11 cases (0.9%) (Fig 1b). Of the 1217 patients that received treatment a karyotype report was available in 81.6% (Fig 1c), while FISH/PCR data was available in 703 (58%) of cases. The

median age of the patients was 16 years (range: 1-76) and there were 70% males. The age distribution of patients by each decade is illustrated in Fig 1d. Of the diagnosed cases 879 (54%) were ≤ 18 years of age. Following initial induction therapy 80% of patients achieved complete hematological remission (CR) and there were 6.6% induction deaths. Only 37 (3%) received an allogeneic SCT in CR1. The 5 year KM estimate for overall and event free survival for the entire cohort of patients that received treatment was 80.4±2% and 57.1±3.8% respectively.

This retrospective data gives a snapshot of the status of treatment of ALL in India and illustrates the challenges. A significant proportion of cases due to various constraints abandon therapy and a significant proportion of treated cases do not have conventional karyotyping or molecular tests done prior to start of therapy which would be considered a deviation from the standard of care in the developed world. This collaborative group has the potential to evaluate and understand these challenges in greater depth over subsequent prospective studies and develop strategies to overcome them.

Figure 1: (a) Illustrate the proportion of patients treated of those diagnosed and also the proportion of those treated that had an induction death (B) Proportion of different sub-types of ALL. (c) Illustrates the proportion of cases where a karyotype was available among the patients that received treatment (d) Age distribution of this cohort (e) Overall survival and (f) Event free survival of patients treated.



Disclosures: No relevant conflicts of interest to declare.

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