

Titre	A Phase III Randomized Trial for Newly Diagnosed High Risk B-Lymphoblastic Leukemia (B-ALL) Including a Stratum Evaluating Dasatinib (NSC#732517) in Patients With Ph-Like Tyrosine Kinase Inhibitor (TKI) Sensitive Mutations
Protocole ID	AALL1131
ClinicalTrials.gov ID	NCT01406756
Type(s) de cancer	Pédiatrique divers
Phase	Phase III
Type étude	Traitement
Médicament	Dasatinib
Institution	CENTRE UNIVERSITAIRE DE SANTE MCGILL HOPITAL DE MONTREAL POUR ENFANTS 1001 boul. Décarie , Montréal, QC, H4A 3J1
Ville	Montréal
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Statut	Actif en recrutement
But étude	This randomized phase III trial studies how well combination chemotherapy works in treating young patients with newly diagnosed B acute lymphoblastic leukemia that is likely to come back or spread, and in patients with Philadelphia chromosome (Ph)-like tyrosine kinase inhibitor (TKI) sensitive mutations. Drugs used in chemotherapy work in different ways to stop the growth of cancer cells, either by killing the cells, by stopping them from dividing, or by stopping them from spreading. Giving more than one drug (combination chemotherapy) and giving the drugs in different doses and in different combinations may kill more cancer cells.
Critères d'éligibilité	<ul style="list-style-type: none"> • Patients must be enrolled on AALL08B1 or APEC14B1 (if available for ALL patients) prior to enrollment on AALL1131 • White Blood Cell Count (WBC) Criteria • Age 1-9.99 years: WBC \geq 50 000/uL • Age 10-30.99 years: Any WBC • Age 1-30.99 years: Any WBC with: <ul style="list-style-type: none"> • Testicular leukemia • CNS leukemia (CNS3) • Steroid pretreatment • Patients must have newly diagnosed B lymphoblastic leukemia (2008 World Health Organization [WHO] classification) (also termed B-precursor acute lymphoblastic leukemia); patients with Down syndrome are also eligible • Organ function requirements for patients with Ph-like ALL and a predicted TKI-sensitive mutation: patients identified as Ph-like with a TKI-sensitive kinase mutation must have assessment of organ function performed within 3 days of study entry onto the dasatinib arm of AALL1131 • Creatinine clearance or radioisotope glomerular filtration rate (GFR) $>$ 70mL/min/1.73 m² or a serum creatinine based on age/gender as follows: <ul style="list-style-type: none"> • Age: Maximum Serum Creatinine (mg/dL) • 1 to $<$ 6 months: 0.4 (male) 0.4 (female) • 6 months to $<$ 1 year: 0.5 (male) 0.5 (female) • 1 to $<$ 2 years: 0.6 (male) 0.6 (female) • 2 $<$ 6 years: 0.8 (male) 0.8 (female)

- 6 to < 10 years: 1.0 (male) 1.0 (female)
- 10 to < 13 years: 1.2 (male) 1.2 (female)
- 13 to < 16 years: 1.5 (male) 1.4 (female)
- > 16 years: 1.7 (male) 1.4 (female)
- Direct bilirubin \leq 3 x upper limit of normal (ULN) for age, and
- Serum glutamate pyruvate transaminase (SGPT) (alanine aminotransferase [ALT]) \leq 10 x upper limit of normal (ULN) for age
- Shortening fraction \geq 27% by echocardiogram, or ejection fraction \geq 50% by gated radionuclide study
- Patients must have an electrocardiogram (EKG) fewer than 6 days prior to enrollment on the dasatinib arm; patients who have had cardiac assessments by echocardiogram or radionuclide scan at the beginning of induction do not need to have these repeated prior to study entry; correct QT interval (QTc) < 450 msec on baseline electrocardiogram as measured by the Frederica or Bazett formula
- No major conduction abnormality (unless a cardiac pacemaker is present)
- No evidence of dyspnea at rest, no exercise intolerance, and a pulse oximetry > 94% at sea level if there is clinical indication for determination
- Patients with seizure disorder may be enrolled if on anticonvulsants and well controlled; however, drugs that induce CYP3A4/5 (carbamazepine, oxcarbazepine, phenytoin, primidone, phenobarbital) should be avoided
- Eligibility criteria for the Longitudinal, Computerized Assessment of Neurocognitive Functioning study
- Patients must be aged 6 to 13 years at time of B-ALL diagnosis, enrolled on AALL1131
- Patients must be English-, French- or Spanish-speaking (languages in which the assessment is available)
- Patients must have no known history of neurodevelopmental disorder prior to diagnosis of B-ALL (e.g., Down syndrome, Fragile X, William's Syndrome, mental retardation)
- Patients must have no significant visual impairment that would prevent computer use and recognition of the visual test stimuli
- Eligibility criteria for the National Cancer Institute (NCI) standard risk patients from AALL0932 enrolling on this study at the end of Induction
- Effective March 19, 2018, patients enrolled on AALL0932, without Down syndrome, meeting the following criteria will NOT be eligible to continue on AALL0932 or the HR B-ALL stratum of this study at the end of Induction:
 - Without favorable cytogenetics (no ETV6-RUNX1 or double trisomies 4+10), with day 8 peripheral blood (PB) minimal residual disease (MRD) \geq 1% and day 29 BM MRD < 0.01%
 - With favorable cytogenetics (ETV6-RUNX1 or double trisomies 4+10), with any day 8 PB MRD and day 29 bone marrow (BM) MRD \geq 0.01%
- Both NCI standard risk (SR) and HR patients without Down syndrome and with testicular disease at diagnosis, who do not meet other VHR criteria
- Effective Amendment 6, patients enrolled on AALL0932, without Down syndrome, meeting the following criteria will NOT be eligible to continue on AALL0932 or the VHR stratum of AALL1131:
 - Intrachromosomal amplification of chromosome 21 (iAMP21)
 - Mixed-lineage leukemia (MLL) rearrangement
 - Hypodiploidy (n < 44 chromosomes and/or a deoxyribonucleic acid [DNA] index < 0.81)
 - Induction failure (M3 BM at day 29)
- Without favorable cytogenetics (no ETV6-RUNX1 or double trisomies 4+10), with day 29 BM MRD \geq 0.01%
- Patients enrolled on AALL0932, with Down syndrome, meeting the following criteria will NOT be eligible to continue on AALL0932 but WILL BE eligible to enroll on the DS HR B-ALL stratum of this study at the end of Induction:
 - Day 29 MRD \geq 0.01%
 - MLL rearrangement
 - Hypodiploidy (n < 45 chromosomes and/or DNA index < 0.81)
- DS HR B-ALL patients initially enrolled on AALL0932 or this study who have Induction failure (M3 BM day 29) or Philadelphia chromosome (BCR-ABL1) will not be eligible for post-Induction therapy on either trial (AALL0932 or AALL1131)
- All patients and/or their parents or legal guardians must sign a written informed consent
- All institutional, Food and Drug Administration (FDA), and NCI requirements for human studies must be met

Critères d'exclusion

- With the exception of steroid pretreatment or the administration of intrathecal cytarabine, patients must not have received any prior cytotoxic chemotherapy for either the current diagnosis of B-ALL or any cancer diagnosed prior to the initiation of protocol therapy on AALL1131; patients cannot have secondary B-ALL that developed after treatment of a prior malignancy with cytotoxic chemotherapy; patients receiving prior steroid therapy may be eligible for AALL1131
- Patients with BCR-ABL1 fusion are not eligible for post-induction therapy on this study but may be eligible to enroll in a successor Children's Oncology Group (COG) Philadelphia positive (Ph+) ALL trial by day 15 Induction
- DS HR B-ALL patients with Induction failure or BCR-ABL1
- Female patients who are pregnant are ineligible
- Lactating females are not eligible unless they have agreed not to breastfeed their infant
- Female patients of childbearing potential are not eligible unless a negative pregnancy test result has been obtained

- Sexually active patients of reproductive potential are not eligible unless they have agreed to use an effective contraceptive method for the duration of their study participation