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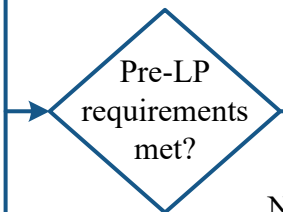
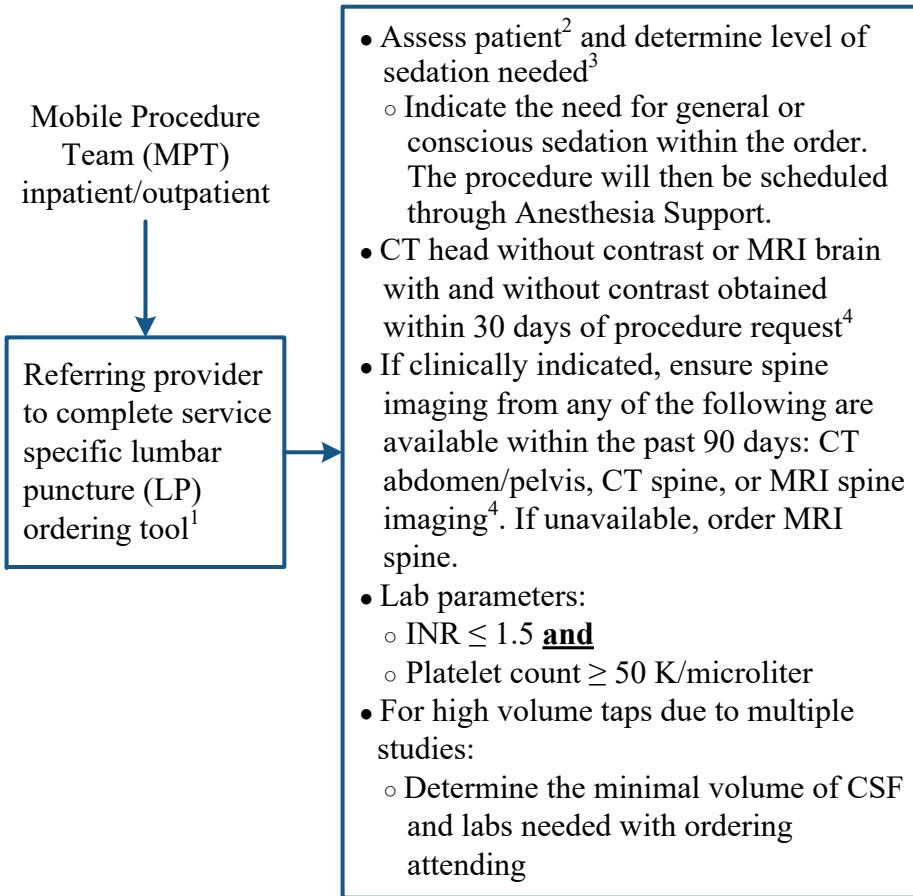
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¹ Adult Hematologic Services include Stem Cell Transplant (SCT), Leukemia, and Lymphoma/Myeloma

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PRESENTATION PRE-PROCEDURE ASSESSMENT



A INTRA- AND POST-PROCEDURE

- Refer to MD Anderson Standardized Protocol for Advanced Practice Registered Nurses (APRNs) and Physician Assistants (PA): Lumbar Puncture and/or Intrathecal Chemotherapy Administration
- Follow chemotherapy administration requirements⁵, if applicable, and universal procedure requirements⁶
 - Ordering provider must have a privileged intrathecal chemotherapy provider to be available prior to start of procedure
- If failed attempt to obtain fluid, document reason in patient note; consider rescheduling procedure with sedation if indicated and/or under fluoroscopy (see [Page 4](#))
- Document specimen collected in specimen log and in procedure note the specimen pick up request/staff name

Post procedure:

- The patient must remain supine for at least 30 minutes
- Notify Primary Team and MPT for findings of positional headache, site leak (consult Pain Service for evaluation for epidural blood patch), bleeding, or changes in neurological status post LP

No
(procedure escalation required⁷)

Findings of edema, intracranial shift, metastatic lesion, mass, bleed or hemorrhage on CT/MRI head

- For MPT to perform LP, the following must be obtained from Neuro-Oncology:
- Assessment, documented clearance, and minimal volume of CSF needed
 - Physician may be required to chaperone the procedure

Coagulopathy (INR > 1.5 , platelet count < 50 K/microliter)

- Correct coagulopathy^{3,8,9} prior to LP and refer to Box A
- If high risk for bleeding, strongly consider LP to be done under fluoroscopy (see [Page 4](#))

¹ For outpatient LP, use Neu Lumbar Puncture Orders smartset.

For inpatient LP, use IP Mobile Procedure Team Paracentesis/Lumbar Puncture Procedure Order Set **and** page Mobile Procedure team via the on-call calendar.

² Refer to [Peri-Procedure Management of Anticoagulants algorithm](#) and [Peri-Procedure Management of Antiplatelet Therapy algorithm](#)

³ If patient needs anxiolytics, refer to [Anxiolysis \(Minimal Sedation\) for Procedures and Tests algorithm](#)

⁴ If changes in assessment and/or recent failed attempts, more recent imaging may be required

⁵ If applicable, only authorized providers who have completed required training may administer intrathecal chemotherapy. Refer to Chemotherapy/Biotherapy (Chemotherapy) Policy (#CLN0512).

⁶ Refer to Universal Protocol for Invasive Procedures Policy (#CLN0516)

⁷ MPT to escalate and consult Neuro-Oncology for recommendation

⁸ For platelet count < 50 K/microliter, consider additional platelets to infuse during the case. For INR > 1.5 , consider giving FFP and/or vitamin K if clinically indicated. For patients on warfarin, higher doses of vitamin K result in extended duration of subtherapeutic INR. Consider limiting dose of vitamin K for patients with a thrombotic risk who will need to be restarted on warfarin. For patients with coagulation disorders, consult Benign Hematology.

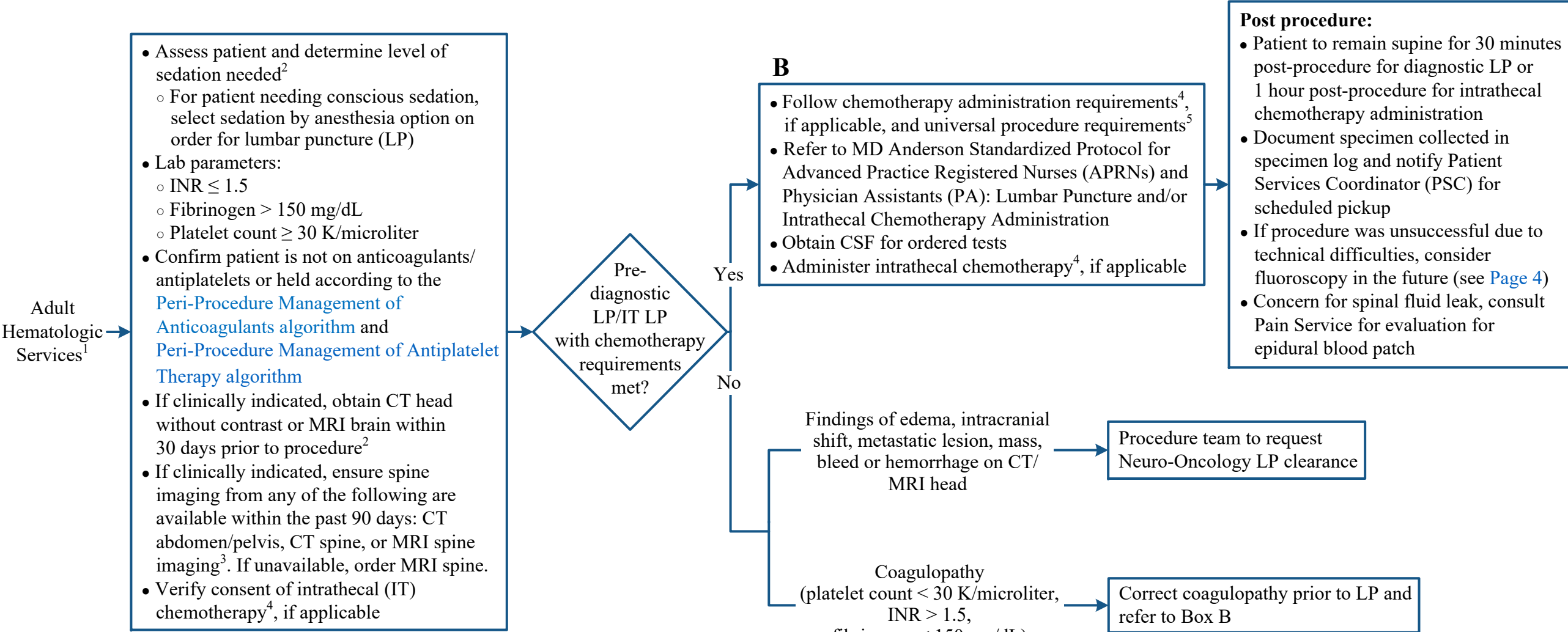
⁹ Blood products to be ordered and transfusions coordinated by Primary Team on the inpatient unit or in the Ambulatory Treatment Center (ATC)

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PRESENTATION

PRE-PROCEDURE
ASSESSMENT

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¹ Adult Hematologic Services include Stem Cell Transplant (SCT), Leukemia, and Lymphoma/Myeloma

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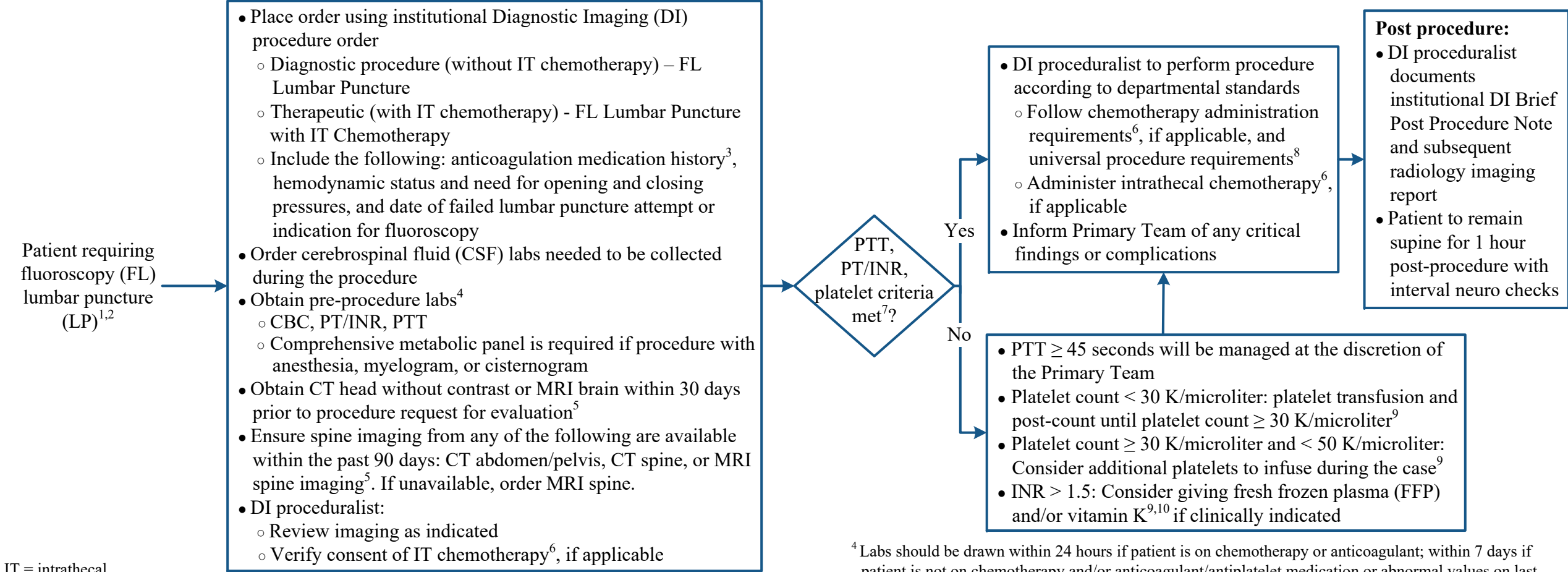
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PRESENTATION

PRE-PROCEDURE ASSESSMENT

INTRA- AND POST-PROCEDURE



IT = intrathecal

¹ FL LP is required if any of the criteria is met: Failed attempt by two different providers at MD Anderson prior to FL LP order placed. If greater than two episodes of failed attempts by two different providers at MD Anderson, proceed directly with FL LP; advanced degenerative spondylosis; scoliosis and/or significant deformity; obesity (BMI around ~45 kg/m²); severe spinal stenosis

Note: History of lumbosacral surgery with instrumentation in the area of the LP as shown on imaging will be evaluated on a case by case basis.

² FL LP with indication of acute bacterial meningitis will be considered urgent/emergent. All other indications will be considered routine.

³ Refer to [Peri-Procedure Management of Anticoagulants algorithm](#) and [Peri-Procedure Management of Antiplatelet Therapy algorithm](#)

⁴ Labs should be drawn within 24 hours if patient is on chemotherapy or anticoagulant; within 7 days if patient is not on chemotherapy and/or anticoagulant/antiplatelet medication or abnormal values on last laboratory result

⁵ If changes in assessment and/or recent failed attempts, more recent imaging may be required

⁶ Refer to Chemotherapy/Biotherapy (Chemotherapy) Policy (#CLN0512)

⁷ Lab criteria is INR ≤ 1.5 **and** platelet count ≥ 50 K/microliter

⁸ Refer to Universal Protocol for Invasive Procedures Policy (#CLN0516)

⁹ Blood products to be ordered and transfusions coordinated by Primary Team on the inpatient unit or in the Ambulatory Treatment Center (ATC)

¹⁰ For patients on warfarin, higher doses of vitamin K result in extended duration of subtherapeutic INR. Consider limiting dose of vitamin K for patients with a thrombotic risk who will need to be restarted on warfarin.

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- MD Anderson Institutional Attachment #ATT3286 – Cleaning, High-Level Disinfection, and Sterilization of Ultrasound Probes
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- MD Anderson Institutional Policy #CLN0516 – Universal Protocol for Invasive Procedures Policy
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DEVELOPMENT CREDITS

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