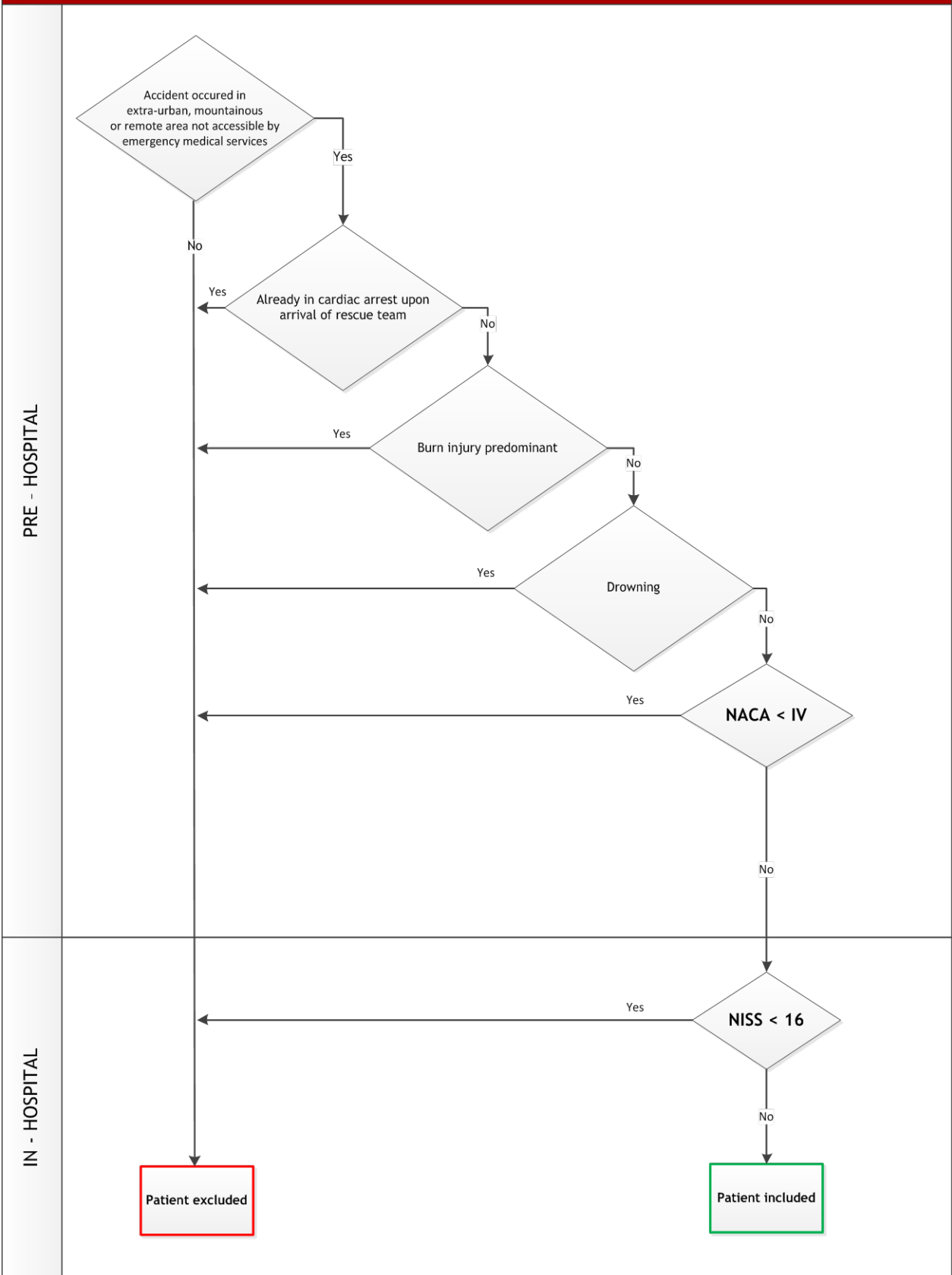


International Alpine Trauma Registry

The following Case Report Form and inclusion / exclusion criteria where defined by the expert panel for the Alpine Trauma Register.

1. INCLUSION & EXCLUSION CRITERIA

INCLUSION CRITERIA
<ul style="list-style-type: none">• A pre - hospital NACA-Score \geq IV• A New Injury Severity Score (ISS) $>$ 15• The accident must occur in extra urban, mountain, alpine or remote areas, not readily accessible by regular Emergency Medical Service.
EXCLUSION CRITERIA
<ul style="list-style-type: none">• Patient should be excluded if they are already in cardiac arrest upon arrival of rescue team at the scene• Patient who suffer drowning are not included• Burn patients should be excluded if the burn represents the predominant injury or if the patient is treated in a specialized burn unit
OPTIONAL EXCLUSION CRITERIA
<ul style="list-style-type: none">• Under specified circumstances accidents how occur on ski slopes can be excluded from the data collection. If a reporting hospital is going to choose this option, it will last for the whole of the study. Also the project coordinator of the Alpine Trauma Register must be informed



2. CASE REPORT FORM

Automatically recorded information			
CRF HEADER	A	Patient ID	Automaticly generatet ID
	B	Hospital	Hospital ID / Hospital transfer history
	C	Logged in as:	LDM-User-Name
	D	Last modified by:	LDM-User-Name
	E	Last modification on:	Date / Time

Patient´s record & case history			
Patient data	1	Patient´s date of birth	<ul style="list-style-type: none"> • Date of birth
	2	Gender	<ul style="list-style-type: none"> • Male • Female • Unkown
	3	ASA classification	<ul style="list-style-type: none"> • ASA 1 • ASA 2 • ASA 3 • ASA 4 • ASA 5 • ASA 6 • Unknown
Accident characteristics	5	Date & time of accident	<ul style="list-style-type: none"> • Date • Time • Unknown
	6	Date & time of first emergency call	<ul style="list-style-type: none"> • Date • Time • Unkown
	7	Type of activity	<ul style="list-style-type: none"> • Freeride / Backcountry • Skiing/Snowboarding • Skitouring • Sledging • Snowshoeing • Riding a snowmobile • Hiking • Climbing • Mountainbiking • Canyoning • Rafting / Wildwater kayaking • Paragliding • Hang-gliding • Working in wilderness /mountain area • Other (should be sprecified) • Unknown

	8	Mechanism of injury	<ul style="list-style-type: none"> • Fall (inc. height in meter) to specify: <ul style="list-style-type: none"> ○ low energy fall ○ high energy fall • Buried by avalanche to specify: <ul style="list-style-type: none"> ○ Patient was buried partial or ○ Patient was buried completely • Crash • Collide with to specify: <ul style="list-style-type: none"> ○ other person ○ object • Trapped by an object • Unknown
	9	Terrain victim was found	<ul style="list-style-type: none"> • Easy • Exposed, steep • Belaying rescue team necessary Extreme • Unknown
	10	Dominating type of injury	<ul style="list-style-type: none"> • Blunt • Penetrating • Unknown
	11	Cardiac arrest during rescue mission	<ul style="list-style-type: none"> • No • Yes to specify: <ul style="list-style-type: none"> ○ Patient died ○ Return of spontaneous circulation • Unknown
Rescue Mission	12	Arrival of the first rescue service at scene	<ul style="list-style-type: none"> • Date • Time • Unknown
	13	Responsive /involved Mountain rescue service	<ul style="list-style-type: none"> • Plain Text
	14	Mission characteristics	<ul style="list-style-type: none"> • Air support • Terrestrial rescue • Terrestrial rescue with technical evacuation <p>Every answer should be specified</p> <ul style="list-style-type: none"> • Helicopter (inc. Name) • Fixed wing (inc. Name) • Unknown

Pre-hospital			
Vital data	15	Systolic blood pressure	<ul style="list-style-type: none"> Value in mm Hg If exact value is missing: <ul style="list-style-type: none"> RTS categories Unknown
	16	Respiratory rate	<ul style="list-style-type: none"> Value in /min If exact value is missing: <ul style="list-style-type: none"> RTS categories Unknown
	17	Patient core temperature	<ul style="list-style-type: none"> Value in C° or fahrenheit If exact value is missing: <ul style="list-style-type: none"> Normal body temperature Mild hypothermia Moderate hypothermia Severe hypothermia Profound hypothermia Unknown They way of measurement should be specified!
Injury data	18	Glasgow Coma Scale	<ul style="list-style-type: none"> Automatical calculation of GCS by recording: <ul style="list-style-type: none"> Eye component Verbal component Motor component If components are missing <ul style="list-style-type: none"> Enter GCS Unknown
	19	NACA-Score	<ul style="list-style-type: none"> NACA 0 NACA I NACA II NACA III NACA IV NACA V NACA VI NACA VII Unkown

20	Analgesics given during pre-hospital care	<ul style="list-style-type: none"> • Ketamine • Opioids • Other (the kind of analgesics should be specified) • Unknown <p>They way of infusion should be specified:</p> <ul style="list-style-type: none"> • Intravenous cannula • Intraosseous needle • Intranasal • Aspiration needle • EV • Other • Unkown
21	Intubation	<ul style="list-style-type: none"> • Yes to specify: the type of airway management: <ul style="list-style-type: none"> ○ A tube in the trachea - drug assisted ○ A tube in the trachea - not drug assisted ○ A supraglottic airway adjunct that prevents speech - drug assisted ○ A supraglottic airway adjunct that prevents speech - not drug assisted ○ Other (The kind of airway management should be specified[^]) • No • Unknown
22	First emergency surgical intervention	<ul style="list-style-type: none"> • Thoracostomy • Coniotomy • None • Unknown
23	Highest level of care	<ul style="list-style-type: none"> • Level I. No Field Care • Level II. Basic Life Support • Level III. Advanced Life Support - No Physician Present • Level IV. Advanced Life Support - Physician Field Care • Level V. Analgesia Only • Unknown

	24	Highest level of care after evacuation	<ul style="list-style-type: none"> • Level I. No Field Care • Level II. Basic Life Support • Level III. Advanced Life Support - No Physician Present • Level IV. Advanced Life Support - Physician Field Care • Level V. Analgesia Only • Unknown
	25	Volumen replacement	<ul style="list-style-type: none"> • Yes to specify: <ul style="list-style-type: none"> Type of solution: <ul style="list-style-type: none"> ○ Hypertonic solution ○ Hypotonic solution ○ Crystalloid solution ○ Other (The used solution should be specified) ○ Unknown Amount of solution: <ul style="list-style-type: none"> ○ Should be recorded in ml Way of infusion: <ul style="list-style-type: none"> ○ Intraosseous needle ○ Intravenous cannula ○ Other (The way of infusion should be specified) ○ Unknown • No • Unknown
In-hospital			
	26	Trauma care level at referring hospital	<ul style="list-style-type: none"> • Level I - Trauma center • Level II - Large hospital • Level III - Small hospital • Other (Trauma care level should be specified) • Unknown
	27	Hospital transfer within 24 hours	<ul style="list-style-type: none"> • Transfer to higher trauma center within 24 hour • No transfer within 24 hours • No detail information about patient transfer

28	Systolic blood pressure	<ul style="list-style-type: none"> • Value in mm Hg <p>If exact value is missing:</p> <ul style="list-style-type: none"> • RTS categories • Unknown <p>If Patient was in general anesthesia, intubated or curarized on arrival at referring hospital the following should be specified</p> <ul style="list-style-type: none"> • Insufficient • Spontaneously sufficient • Unknown
29	Respiratory rate	<ul style="list-style-type: none"> • Value in /min <p>If exact value is missing:</p> <ul style="list-style-type: none"> • RTS categories • Unknown
30	Aterial Base Exess	<ul style="list-style-type: none"> • Value in mmol/l • Not measured within the first hour after arrival in hospital • Unkown
31	International normalized ratio INR	<ul style="list-style-type: none"> • Exact value • Unknown
32	Partial thromboplastin time	<ul style="list-style-type: none"> • Exact value • Unknown
33	Hemoglobin	<ul style="list-style-type: none"> • Exact value in g% • Unknown

	34	Patient core temperature	<ul style="list-style-type: none"> • Value in C° or fahrenheit <p>If exact value is missing:</p> <ul style="list-style-type: none"> • Normal body temperature • Mild hypothermia • Moderate hypothermia • Severe hypothermia • Profound hypothermia • Unknown <p>They way of measurement should be specified:</p> <ul style="list-style-type: none"> • Oesophageal • Nasopharyngeal • Rectal • Bladder • Tympanic membrane • Infra-red tympanic membrane thermometer • Blood • Muscle • Other (should be specified) • Unknown
	35	In-hospital care	<ul style="list-style-type: none"> • Pelvic bleeding control (radiological intervention or external pelvis packing) • Emergency surgery to control bleeding (e.g. abdominal, thoracic) • Emergency intracranial surgery (except ICP) • Other (should be specified) • Unknown • None
	36	Traumatic brain injury	<ul style="list-style-type: none"> • Yes • No • Unkown

Injury coding			
Injury coding	37	Injury coding	<p>For every injury:</p> <ul style="list-style-type: none"> • Body region based on AIS- Body regions • AIS severity score • Injury was already recorded pre-hospital: <ul style="list-style-type: none"> ○ Yes ○ No ○ Not applicable • Diagnosis details • Injury details
Outcome & survival status			
Outcome & survival status	38	Survival status (at discharge from acute care hospital)	<ul style="list-style-type: none"> • Died in hospital • Survived until discharge • Unknown
	38	Survival status (30 days after injury)	<ul style="list-style-type: none"> • Alive • Dead • Unknown
	39	Glasgow Outcome Scale	<ul style="list-style-type: none"> • Good recovery • Moderate disability • Severe disability • Persistent vegetative state • Death • Unknown
	40	Discharge destination	<ul style="list-style-type: none"> • Home • Rehabilitation • Morgue • Another CCU, higher treatment level • Another CCU, same level of care • Another intermediate or low care somatic hospital ward • Other • Unknown
Informed consent			
Informed consent		Informed consent	<ul style="list-style-type: none"> • Yes, given • No, not given • Patient was unable to give it