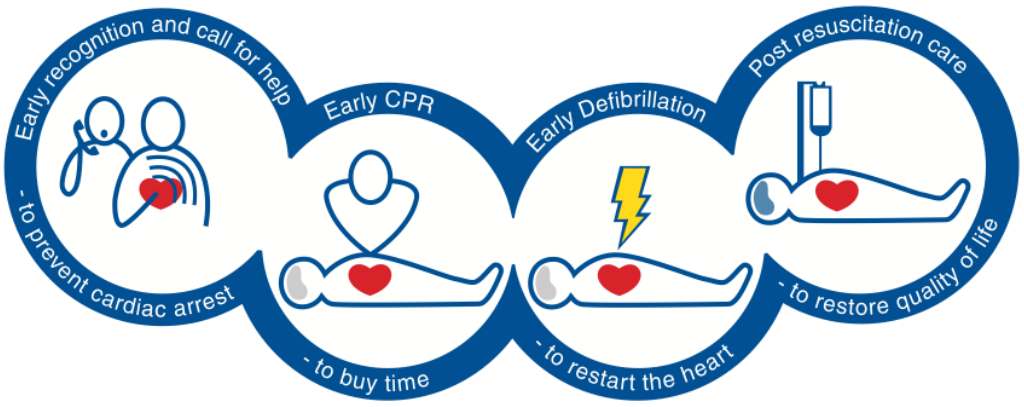
ANEXOS

Probable enfermedad cardiaca	**82%**
• En especial cardiopatía isquémica /síndrome coronario agudo (SCA)	
Enfermedades internas no cardiacas	**8,6%**
• Enfermedad pulmonar	4,3
• Patología cerebrovascular	2,2
• Cáncer	0,9
• Hemorragia digestiva	0,3
• Obstétricas/Pediátricas	0,2
• Embolismo pulmonar (TEP)	0,2
• Epilepsia	0,2
• Diabetes	0,1
• Patología renal	0,1
Situaciones externas no cardiacas	**9%**
• Traumatismos	3,1
• Asfixia	2,2
• Sobredosis de fármacos	1,9
• Otras formas de suicidio	0,9
• Ahogamiento	0,5
• Otras causas externas	0,2
• Descargas eléctricas/rayos	0,1

Anexo 1. Causas primarias de PCR en el ámbito pre-hospitalario [8]



Anexo 2. Pasos de la cadena de la supervivencia[10]

SEQUENCE / Action		Technical description
SAFETY **Make sure you, the victim and any bystanders are safe**		
RESPONSE **Check the victim for a response**		Gently shake his shoulders and ask loudly: "Are you all right?" If he responds leave him in the position in which you find him, provided there is no further danger; try to find out what is wrong with him and get help if needed; reassess him regularly
AIRWAY **Open the airway**		Turn the victim onto his back if necessary Place your hand on his forehead and gently tilt his head back; with your fingertips under the point of the victim's chin, lift the chin to open the airway
BREATHING **Look, listen and feel for normal breathing**		In the first few minutes after cardiac arrest, a victim may be barely breathing, or taking infrequent, slow and noisy gasps. Do not confuse this with normal breathing. Look, listen and feel for **no more** than 10 seconds to determine whether the victim is breathing normally. If you have any doubt whether breathing is normal, act as if it is they are not breathing normally and prepare to start CPR
UNRESPONSIVE AND NOT BREATHING NORMALLY **Alert emergency services**		Ask a helper to call the emergency services (112) if possible otherwise call them yourself Stay with the victim when making the call if possible Activate speaker function on phone to aid communication with dispatcher
SEND FOR AED **Send someone to get AED**		Send someone to find and bring an AED if available. If you are on your own, do not leave the victim, start CPR

Anexo 3.Secuencia de acciones paso a paso para la realización de SVB/DEA por un reanimador entrenado para tratar un adulto víctima de parada cardiaca, según la ERC. [12]

CIRCULATION

Start chest compressions

Kneel by the side of the victim

Place the heel of one hand in the centre of the victim's chest; (which is the lower half of the victim's breastbone (sternum))

Place the heel of your other hand on top of the first hand

Interlock the fingers of your hands and ensure that pressure is not applied over the victim's ribs

Keep your arms straight

Do not apply any pressure over the upper abdomen or the bottom end of the bony sternum (breastbone)

Position yourself vertically above the victim's chest and press down on the sternum at least 5 cm but not more than 6 cm.

After each compression, release all the pressure on the chest without losing contact between your hands and the sternum

Repeat at a rate of 100-120 min^{-1}

IF TRAINED AND ABLE

Combine chest compressions with rescue breaths

After 30 compressions open the airway again using head tilt and chin lift

Pinch the soft part of the nose closed, using the index finger and thumb of your hand on the forehead

Allow the mouth to open, but maintain chin lift

Take a normal breath and place your lips around his mouth, making sure that you have a good seal

Blow steadily into the mouth while watching for the chest to rise, taking about 1 second as in normal breathing; this is an effective rescue breath

Maintaining head tilt and chin lift, take your mouth away from the victim and watch for the chest to fall as air comes out

Take another normal breath and blow into the victim's mouth once more to achieve a total of two effective rescue breaths. Do not interrupt compressions by more than 10 seconds to deliver two breaths. Then return your hands without delay to the correct position on the sternum and give a further 30 chest compressions

Anexo 3 (continuación).

		Continue with chest compressions and rescue breaths in a ratio of 30:2
IF UNTRAINED OR UNABLE TO DO RESCUE BREATHS **Continue compression only CPR**		Give chest compressions only CPR (continuous compressions at a rate of 100-120 min^{-1})
WHEN AED ARRIVES **Switch on the AED and attach the electrode pads**		As soon as the AED arrives: Switch on the AED and attach the electrode pads on the victim's bare chest If more than one rescuer is present, CPR should be continued while electrode pads are being attached to the chest
Follow the spoken/visual directions		Ensure that nobody is touching the victim while the AED is analysing the rhythm
If a shock is indicated, **deliver shock**		Ensure that nobody is touching the victim Push shock button as directed (fully automatic AEDs will deliver the shock automatically) Immediately restart CPR 30:2 Continue as directed by the voice / visual prompts
If no shock is indicated, continue CPR		Immediately resume CPR. Continue as directed by the voice/visual prompts

Anexo 3 (continuación).

IF NO AED IS AVAILABLE CONTINUE CPR

Continue CPR

Do not interrupt resuscitation until:

- a health professional tells you to stop
- the victim is definitely waking "up", moving, opening eyes and breathing normally
- you become exhausted

IF UNRESPONSIVE BUT BREATHING NORMALLY

If you are certain the victim is breathing normally but is still unresponsive, place in the recovery position (see First aid chapter).

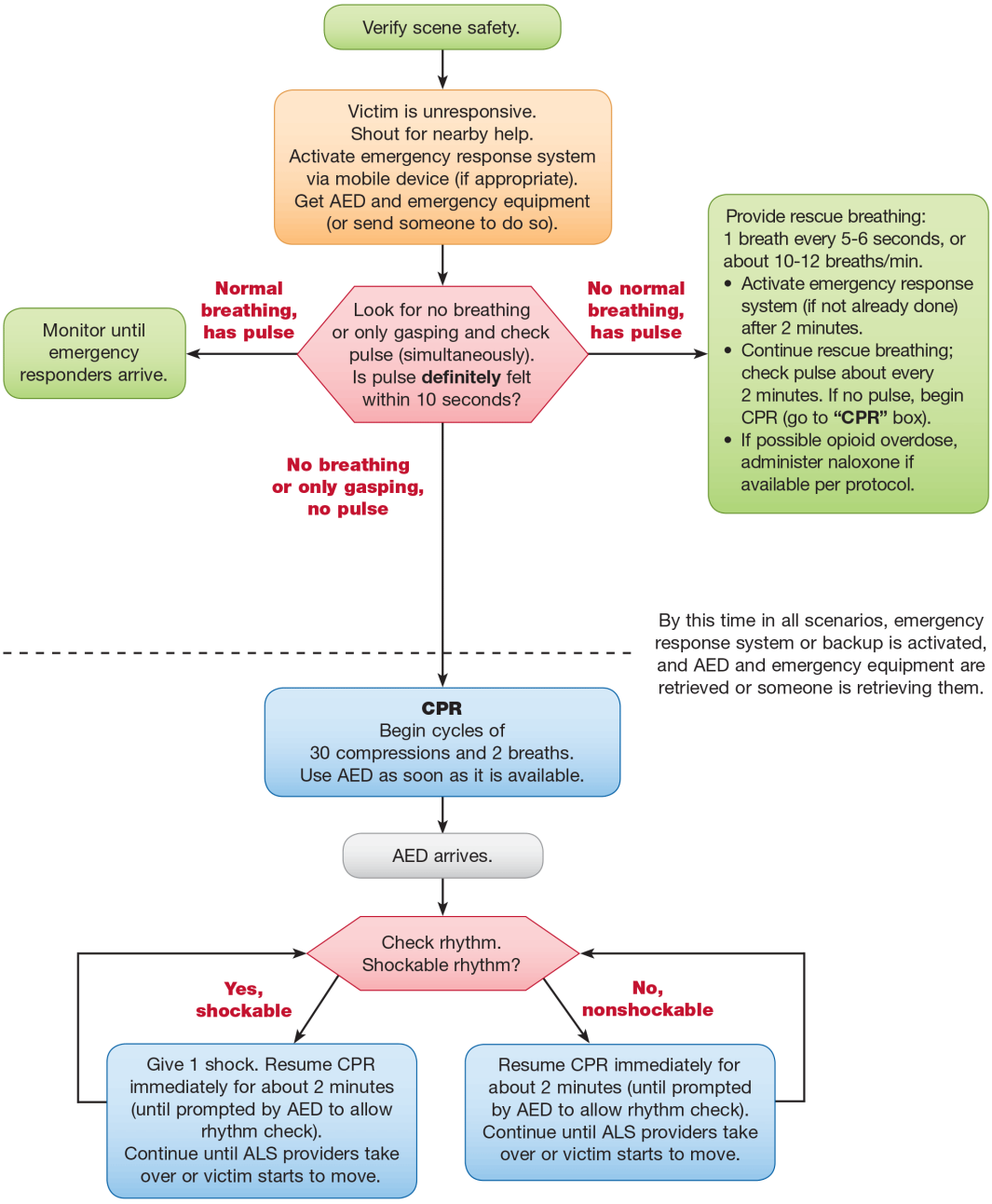
It is rare for CPR alone to restart the heart. Unless you are certain the person has recovered continue CPR

Signs the victim has recovered

- waking up
- moving
- opens eyes
- normal breathing

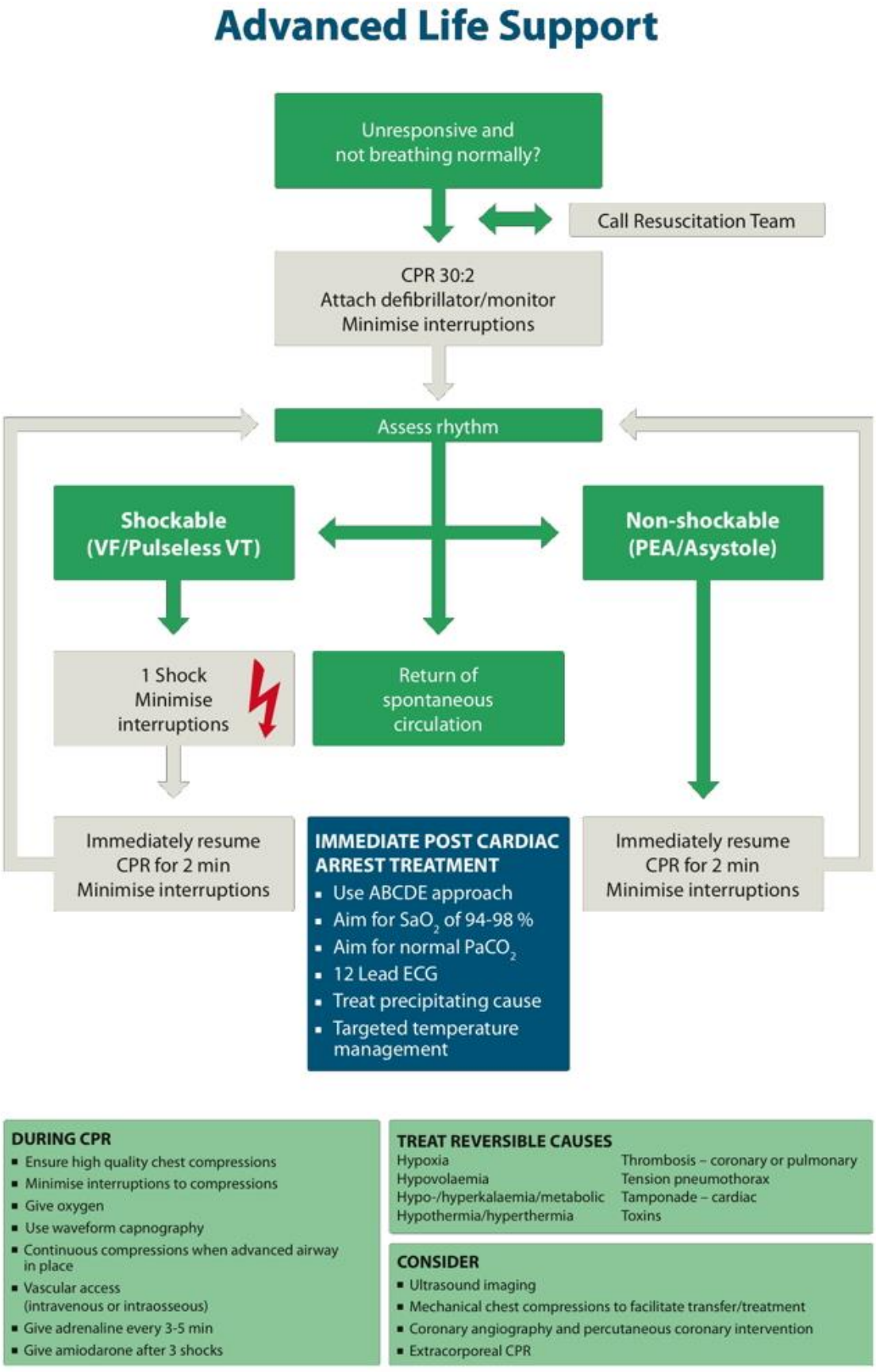
Be prepared to restart CPR immediately if patient deteriorates

Anexo 3 (continuación).

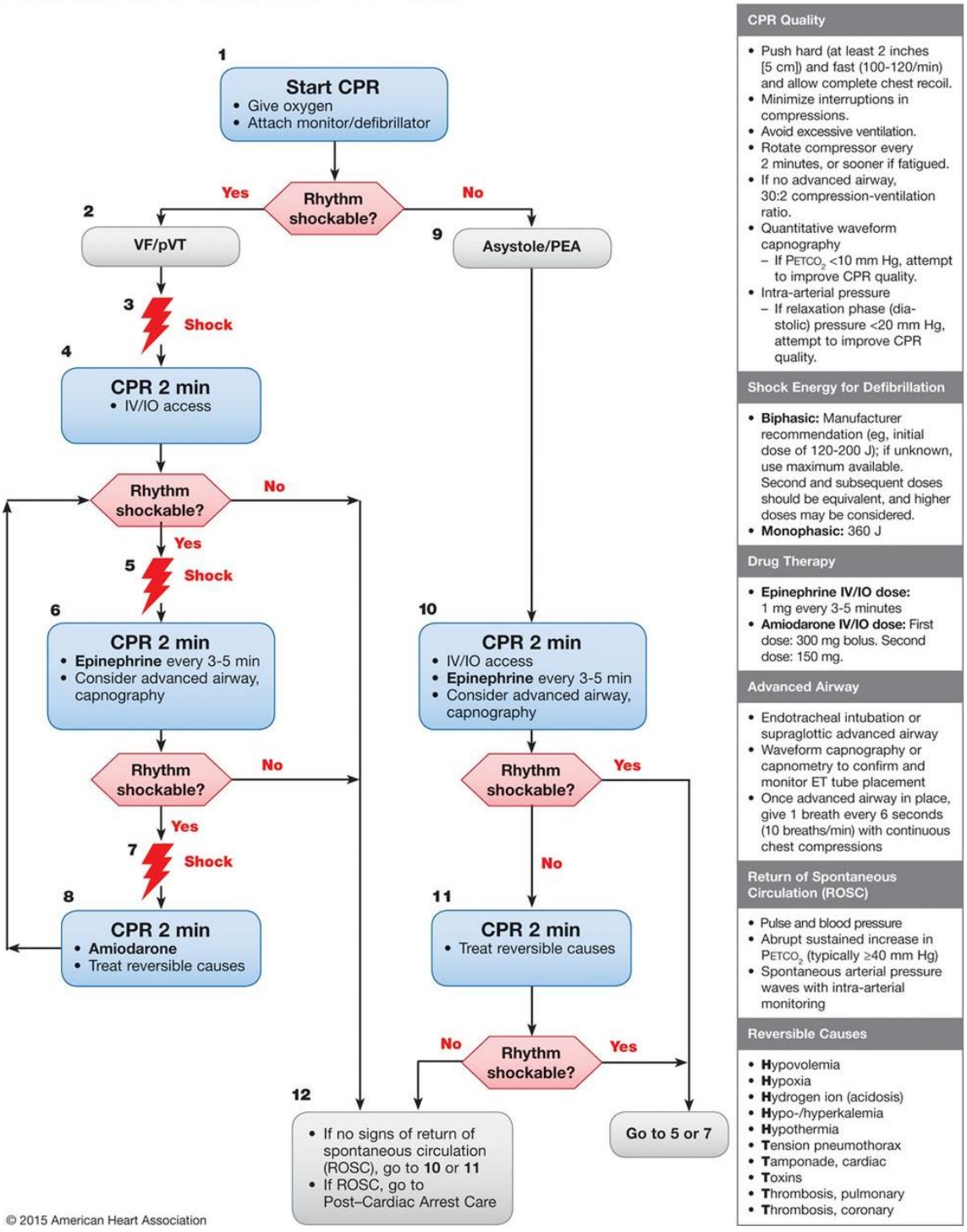


Anexo 4. Algoritmo de soporte vital básico para profesionales sanitarios según la AHA[4].

Anexo 5. Clases de recomendación y niveles de evidencia[13].



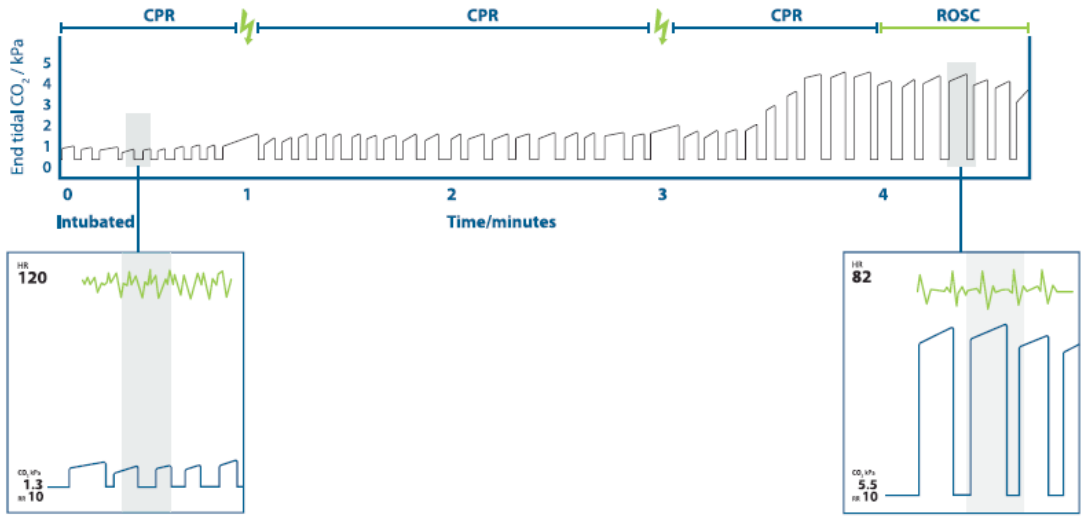
Anexo 6. Algoritmo de Soporte Vital Avanzado de la ERC [22].



Anexo 7. Algoritmo de Soporte vital avanzado, según la AHA [20]

Grado de recomendación	Significado
A	Extremadamente recomendable (buena evidencia de que la medida es eficaz y los beneficios superan ampliamente a los perjuicios).
B	Recomendable (al menos moderada evidencia de que la medida es eficaz y los beneficios superan a los perjuicios).
C	Ni recomendable ni desaconsejable (al menos moderada evidencia de que la medida es eficaz, pero los beneficios son muy similares a los perjuicios y no puede justificarse una recomendación general).
D	Desaconsejable (al menos moderada evidencia de que la medida es ineficaz o de que los perjuicios superan a los beneficios).
I	Evidencia insuficiente, de mala calidad o contradictoria, y el balance entre beneficios y perjuicios no puede ser determinado.

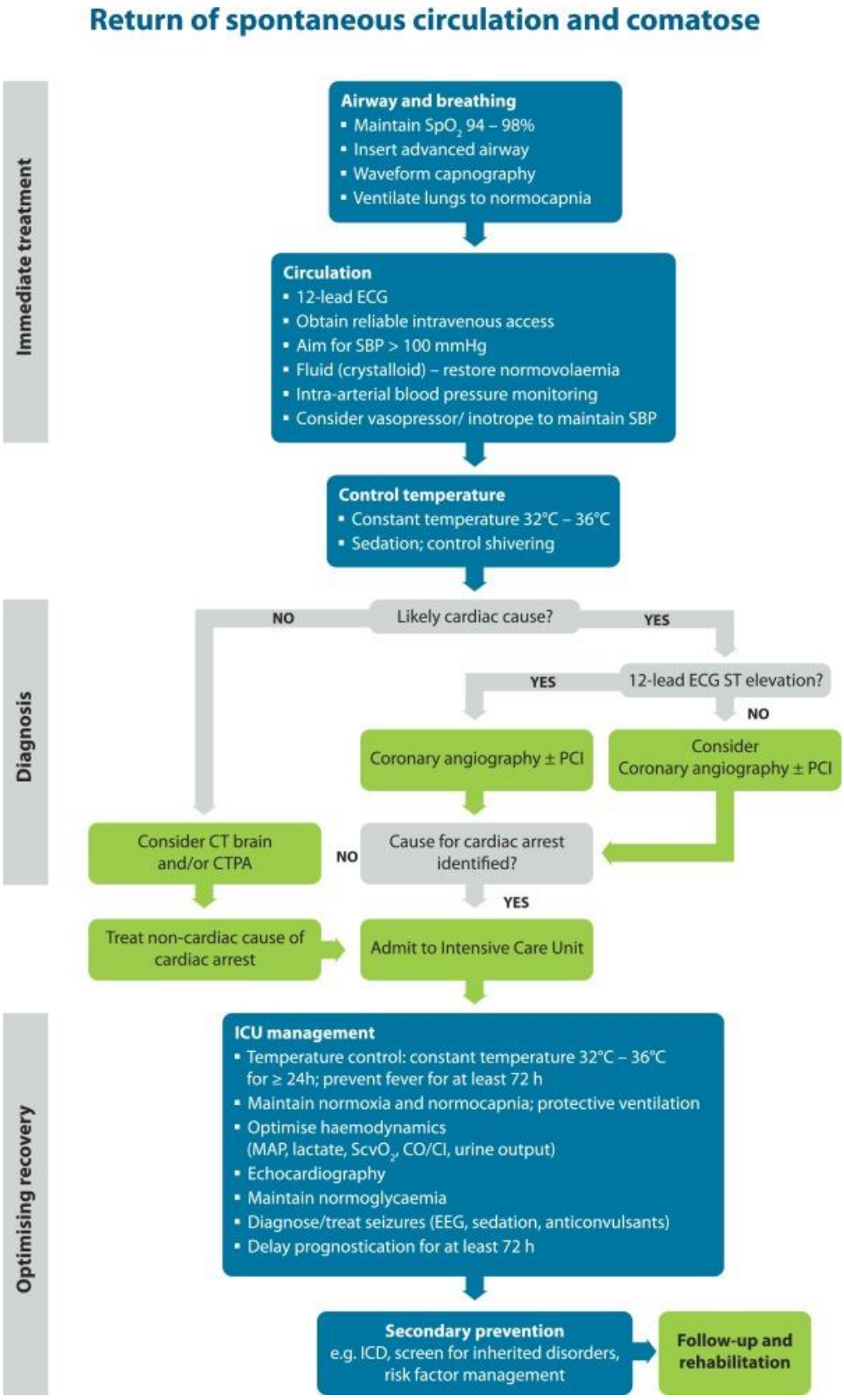
Anexo 8. Significado de los grados de recomendación [24]



Anexo 9 . Cambios de la capnografía en forma de onda durante la PCR, desde la intubación hasta la RCE [22].

Técnicas no invasivas	Técnicas invasivas
Mantas y colchones:	*Infusión de fluidos fríos intravenosos*
Sistemas de aire	*Sistemas de circulación extracorpórea:*
Sistemas de agua circulante	Hemofiltración
Sistemas de almohadillas de hidrogel	*Bypass* cardiopulmonar/femorocarotídeo
Bolsas de hielo	*Sistemas endovasculares*
Cascos y gorros con hielos Inmersión en agua fría	*Lavados nasal, gástrico, rectal*
Uso de toallas empapadas	*Lavados con intercambio peritoneal fríos*

Anexo 10. Métodos de aplicación de la hipotermia tras la parada cardiaca [29].



Anexo 11. Algoritmo de manejo del retorno a la circulación espontánea comatoso de la ERC [28].

Action		Technical description
SUSPECT CHOKING **Be alert to choking particularly if victim is eating**		
ENCOURAGE TO COUGH **Instruct victim to cough**		
GIVE BACK BLOWS **If cough becomes ineffective give up to 5 back blows**		If the victim shows signs of severe airway obstruction and is conscious apply five back blows Stand to the side and slightly behind the victim Support the chest with one hand and lean the victim well forwards so that when the obstructing object is dislodged it comes out of the mouth rather than goes further down the airway; Give five sharp blows between the shoulder blades with the heel of your other hand.
GIVE ABDOMINAL THRUSTS **If back blows are ineffective give up to 5 abdominal thrutsts**		If five back blows fail to relieve the airway obstruction, give up to five abdominal thrusts as follows: Stand behind the victim and put both arms round the upper part of the abdomen; Lean the victim forwards; Clench your fist and place it between the umbilicus (navel) and the ribcage; Grasp this hand with your other hand and pull sharply inwards and upwards; Repeat up to five times. If the obstruction is still not relieved, continue alternating five back blows with five abdominal thrusts.

Anexo 12. Secuencia de acciones paso a paso para el tratamiento de un adulto víctima de obstrucción de la vía aérea por cuerpo extraño, según la guía de la ERC [12].

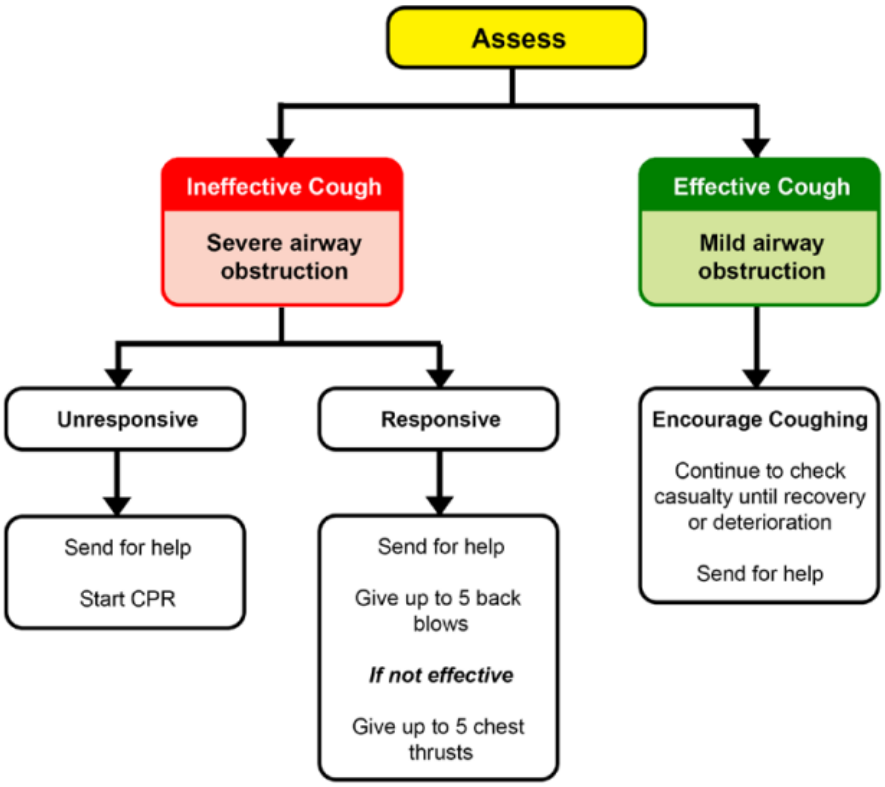
START CPR

Start CPR If the victim becomes unresponsive

If the victim at any time becomes unresponsive:

- support the victim carefully to the ground;
- immediately activate the ambulance service;
- begin CPR with chest compressions.

Anexo 12 (continuación).



Anexo 13. Tratamiento de OVACE, según la guía de la ANZCOR[54].